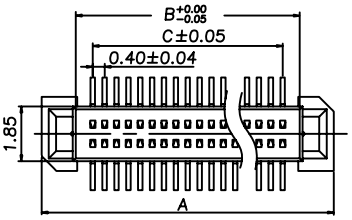
PRODUCT RANGE

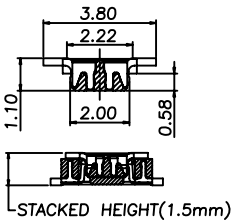
0.4mm Board to Board Connectors

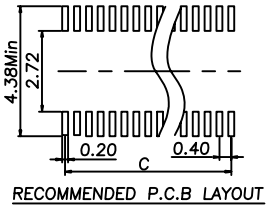
NP04-P03X-xxx

Material:
Housing:High Temperature Plastic UL94V-0
Contacts:Phosphor Bronze.

Electrical Characteristics:
Current Rating:0.3 AMP.
Dielectric Withstanding Voltage:AC 100V For 1 minute
Insulator Resistance:100M OHM min. at DC100V
Contact Resistance:90m ohm max. at AC 1mA.
Operating Temperature:-25°C ~ +85°C.

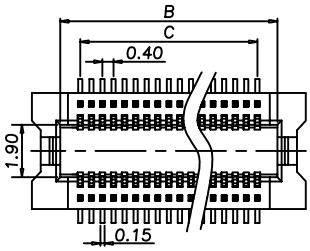


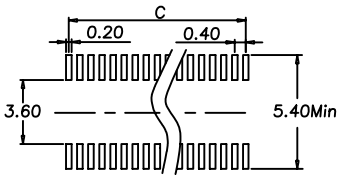




100	23.10	20.95	19.60
90	21.10	18.95	17.60
80	19.10	16.95	15.60
72	17.50	15.35	14.00
70	17.10	14.95	13.60
60	15.10	12.95	11.60
50	13.10	10.95	9.60
40	11.10	8.95	7.60
34	9.90	7.75	6.40
30	9.10	6.95	5.60
26	8.30	6.15	4.80
24	7.90	5.75	4.40
22	7.50	5.35	4.00
20	7.10	4.95	3.60
16	6.30	4.15	2.80
14	5.90	3.75	2.40
12	5.50	3.35	2.00
10	5.10	2.95	1.60
Position	A	B	C

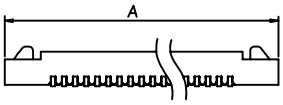
NP04-S12X-xxx

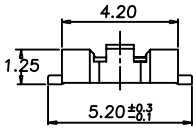




RECOMMENDED P.C.B LAYOUT

Position / Dimension	10 Thru 100
A	0.40X No. of Positions /2+3.10
B	0.40X No. of Positions /2+0.95
C	0.40X No. of Positions /2-0.40





Board to Board offset Application Example

0.5mm Board to Board Connectors

DF12-P28P-xxx

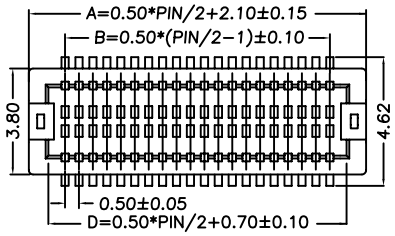
**Contact Dimension

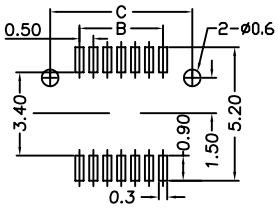
Contact	DIM. A	DIM. B	DIM. C	DIM. D
14	5.60	3.00	5.10	4.20
20	7.10	4.50	6.60	5.70
30	9.60	7.00	9.10	8.20
32	10.10	7.50	9.60	8.70
36	11.10	8.50	10.60	9.70
40	12.10	9.50	11.60	10.70
50	14.60	12.00	14.10	13.20
60	17.10	14.50	16.60	15.70

Female Height Dim A1	Mating Height Dim B1
2.23	3.50
2.73	4.00
4.23	5.50
4.73	6.00

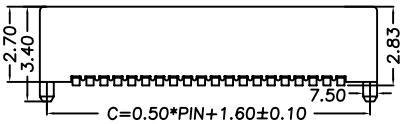
Material and Plating
1.Housing : LCP (Natural Color)UL94V-0
2.Contact : Phosphor Bronz

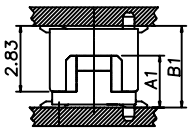
Specifications
1. Current Rating : 0.5A AC/DC
2. Voltage Rating : 50V AC/DC
3. Contact Resistance : 30m ohm. max.
4. Insulation Resistance : 100M ohm. min.at 100V DC
5. Withstanding Voltage : 100V AC for one minute
6. Operating Temperature Range : -20°C to +105°C





PCB LAYOUT





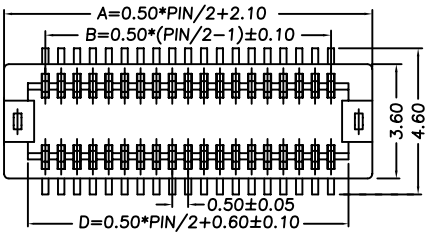
Mating Draw (Ref)

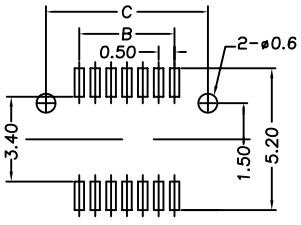
DF12-S12P-xxx

**Contact Dimension

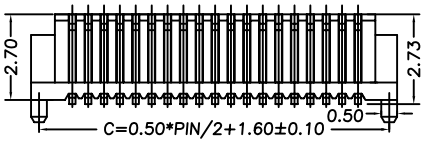
Contact	DIM. A	DIM. B	DIM. C	DIM. D
14	5.60	3.00	5.10	4.10
20	7.10	4.50	6.60	5.60
30	9.60	7.00	9.10	8.10
32	10.10	7.50	9.60	8.60
36	11.10	8.50	10.60	9.60
40	12.10	9.50	11.60	10.60
50	14.60	12.00	14.10	13.10
60	17.10	14.50	16.60	15.60

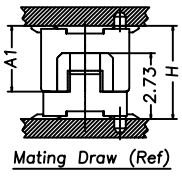
Male Height Dim A1	Mating Height Dim H
2.83	4.00





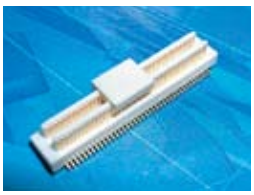
PCB LAYOUT





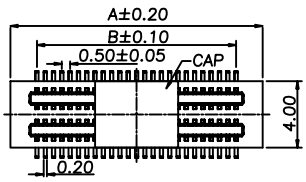
Mating Draw (Ref)

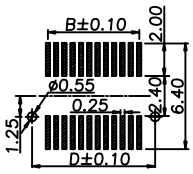
NP05K-P20PC-xxx



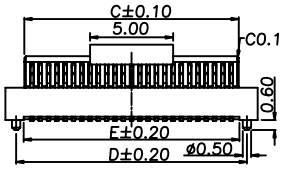
Specifications
1. Current Rating : 0.5A AC/DC
2. Voltage Rating : 50V AC/DC
3. Contact Resistance : 30m ohm. max.
4. Insulation Resistance : 100M ohm. min.at 100V DC
5. Withstanding Voltage : 100V AC for one minute
6. Operating Temperature Range : −20°C to +105°C

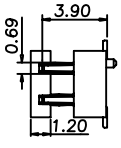
Material and Plating
1.Housing : High Temp, Plastic (Nylon 46 UL94V−0)
2.Contact : Phosphor Bronz
3.Plating : Gold Plated
Package:800pcs/Reel

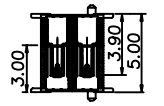




PCB LAYOUT







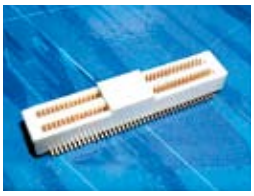
Mating Draw (Ref)

Socket Height Dim	Mating Height Dim H
3.00	5.00

Dimension:

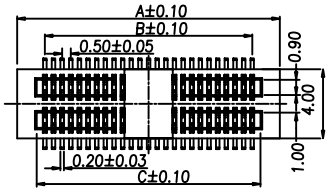
Contact	DIM.A	DIM.B	DIM.C	DIM.D	DIM.E	Contact	DIM.A	DIM.B	DIM.C	DIM.D	DIM.E	Contact	DIM.A	DIM.B	DIM.C	DIM.D	DIM.E
10	5.20	2.00	2.92	3.90	3.20	28	9.70	6.50	7.42	8.40	7.70	46	14.20	11.00	11.92	12.90	12.20
12	5.70	2.50	3.42	4.40	3.70	30	10.20	7.00	7.92	8.90	8.20	48	14.70	11.50	12.42	13.40	12.70
14	6.20	3.00	3.92	4.90	4.20	32	10.70	7.50	8.42	9.40	8.70	50	15.20	12.00	12.92	13.90	13.20
16	6.70	3.50	4.42	5.40	4.70	34	11.20	8.00	8.92	9.90	9.20	60	17.70	14.50	15.42	16.40	15.70
18	7.20	4.00	4.92	5.90	5.20	36	11.70	8.50	9.42	10.40	9.70	70	20.20	16.50	17.95	18.90	18.20
20	7.70	4.50	5.42	6.40	5.70	38	12.20	9.00	9.92	10.90	10.20	80	22.70	19.50	20.42	21.40	20.70
22	8.20	5.00	5.92	6.90	6.20	40	12.70	9.50	10.42	11.40	10.70	90	25.20	22.00	22.92	23.90	23.20
24	8.70	5.50	6.42	7.40	6.70	42	13.20	10.00	10.92	11.90	11.20	100	27.70	24.50	25.42	26.40	25.70
26	9.20	6.00	6.92	7.90	7.20	44	13.70	10.50	11.42	12.40	11.70	120	32.70	29.50	30.42	31.40	30.70

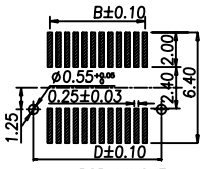
NP05K-S30PC-xxx



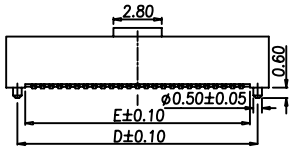
Material and Plating
1.Housing : High Temp, Plastic (Nylon 46 UL94V−0)
2.Contact : Phosphor Bronz
3.Plating : Gold Plated
Package:1200pcs/Reel

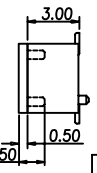
Specifications
1. Current Rating : 0.5A AC/DC
2. Voltage Rating : 50V AC/DC
3. Contact Resistance : 30m ohm. max.
4. Insulation Resistance : 100M ohm. min.at 100V DC
5. Withstanding Voltage : 100V AC for one minute
6. Operating Temperature Range : −20°C to +105°C

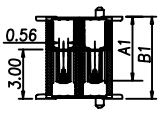




PCB LAYOUT







Mating Draw (Ref)

Plug Height Dim A1	Mating Height Dim B1
3.90	5.00
4.40	5.50

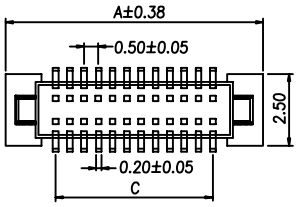
Dimension:

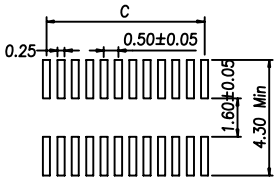
Contact	DIM.A	DIM.B	DIM.C	DIM.D	DIM.E	Contact	DIM.A	DIM.B	DIM.C	DIM.D	DIM.E	Contact	DIM.A	DIM.B	DIM.C	DIM.D	DIM.E
10	5.20	2.00	2.92	3.90	3.00	28	9.70	6.50	7.42	8.40	7.50	46	14.20	11.00	11.92	12.90	12.00
12	5.70	2.50	3.42	4.40	3.50	30	10.20	7.00	7.92	8.90	8.00	48	14.70	11.50	12.42	13.40	12.50
14	6.20	3.00	3.92	4.90	4.00	32	10.70	7.50	8.42	9.40	8.50	50	15.20	12.00	12.92	13.90	13.00
16	6.70	3.50	4.42	5.40	4.50	34	11.20	8.00	8.92	9.90	9.00	60	17.70	14.50	15.42	16.40	15.50
18	7.20	4.00	4.92	5.90	5.00	36	11.70	8.50	9.42	10.40	9.50	70	20.20	16.50	17.95	18.90	18.00
20	7.70	4.50	5.42	6.40	5.50	38	12.20	9.00	9.92	10.90	10.00	80	22.70	19.50	20.42	21.40	20.50
22	8.20	5.00	5.92	6.90	6.00	40	12.70	9.50	10.42	11.40	10.50	90	25.20	22.00	22.92	23.90	23.00
24	8.70	5.50	6.42	7.40	6.50	42	13.20	10.00	10.92	11.90	11.00	100	27.70	24.50	25.42	26.40	25.50
26	9.20	6.00	6.92	7.90	7.00	44	13.70	10.50	11.42	12.40	11.50	120	32.70	29.50	30.42	31.40	30.50

NP0519-P10X-xxx

Specifications
1.Current Rating : 0.5A MAX
2.Dielectric withstanding Voltage : 150V (r.m.s) AC AT 0.5mA For 1 Minute
3.Contact Resistance : 30m ohm. max.
4.Insulation Resistance : 1000M Min AT 500V DC.
5.Operating Temperature Range : −40°C to +105°C

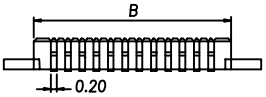
Material
1.Housing : High Temp, Plastic (UL94V−0)
2.Contact : Copper Alloy(t=0.2mm)
Plating Gold over Nickel

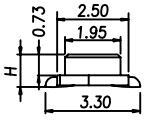




Reconnended P.C.Board

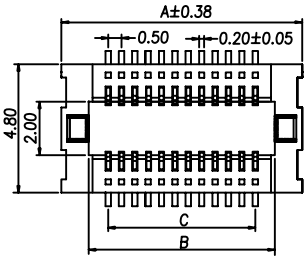
Mated Heigh		H
1.5mm	Male	1.25
	Female	1.35
2.0mm	Male	1.25
	Female	1.85
2.5mm	Male	1.75
	Female	1.85
3.0mm	Male	1.25
	Female	2.35

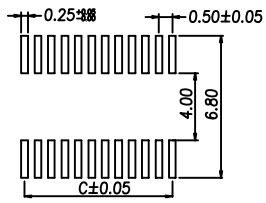




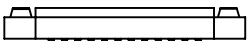
Contact	Dimension			Contact	Dimension		
	A	B	C		A	B	C
10	5.50	3.40	2.00	56	17.00	14.90	13.50
12	6.00	3.90	2.50	58	17.50	15.40	14.00
14	6.50	4.40	3.00	60	18.00	15.90	14.50
16	7.00	4.90	3.50	62	18.50	16.40	15.00
18	7.50	5.40	4.00	64	19.00	16.90	15.50
20	8.00	5.90	4.50	66	19.50	17.40	16.00
22	8.50	6.40	5.00	68	20.00	17.90	16.50
24	9.00	6.90	5.50	70	20.50	18.40	17.00
26	9.50	7.40	6.00	72	21.00	18.90	17.50
28	10.00	7.90	6.50	74	21.50	19.40	18.00
30	10.50	8.40	7.00	76	22.00	19.90	18.50
32	11.00	8.90	7.50	78	22.50	20.40	19.00
34	11.50	9.40	8.00	80	23.00	20.90	19.50
36	12.00	9.90	8.50	82	23.50	21.40	20.00
38	12.50	10.40	9.00	84	24.00	21.90	20.50
40	13.00	10.90	9.50	86	24.50	22.40	21.00
42	13.50	11.40	10.00	88	25.00	22.90	21.50
44	14.00	11.90	10.50	90	25.50	23.40	22.00
46	14.50	12.40	11.00	92	26.00	23.90	22.50
48	15.00	12.90	11.50	94	26.50	24.40	23.00
50	15.50	13.40	12.00	96	27.00	24.90	23.50
52	16.00	13.90	12.50	98	27.50	25.40	24.00
54	16.50	14.40	13.00	100	28.00	25.90	24.50

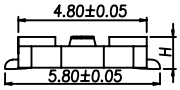
NP0519-S15X-xxx





Reconnended P.C.Board
Hole Layout





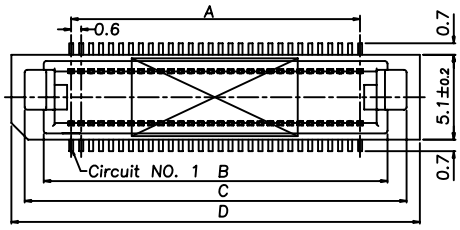
Mated Heigh		H
1.5mm	Male	1.25
	Female	1.35
2.0mm	Male	1.25
	Female	1.85
2.5mm	Male	1.75
	Female	1.85
3.0mm	Male	1.25
	Female	2.35

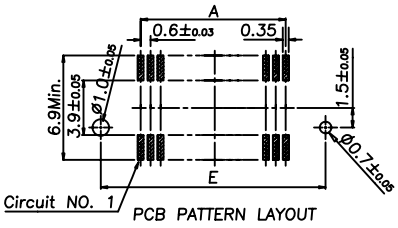
Contact	Dimension			Contact	Dimension		
	A	B	C		A	B	C
10	5.50	3.40	2.00	56	17.00	14.90	13.50
12	6.00	3.90	2.50	58	17.50	15.40	14.00
14	6.50	4.40	3.00	60	18.00	15.90	14.50
16	7.00	4.90	3.50	62	18.50	16.40	15.00
18	7.50	5.40	4.00	64	19.00	16.90	15.50
20	8.00	5.90	4.50	66	19.50	17.40	16.00
22	8.50	6.40	5.00	68	20.00	17.90	16.50
24	9.00	6.90	5.50	70	20.50	18.40	17.00
26	9.50	7.40	6.00	72	21.00	18.90	17.50
28	10.00	7.90	6.50	74	21.50	19.40	18.00
30	10.50	8.40	7.00	76	22.00	19.90	18.50
32	11.00	8.90	7.50	78	22.50	20.40	19.00
34	11.50	9.40	8.00	80	23.00	20.90	19.50
36	12.00	9.90	8.50	82	23.50	21.40	20.00
38	12.50	10.40	9.00	84	24.00	21.90	20.50
40	13.00	10.90	9.50	86	24.50	22.40	21.00
42	13.50	11.40	10.00	88	25.00	22.90	21.50
44	14.00	11.90	10.50	90	25.50	23.40	22.00
46	14.50	12.40	11.00	92	26.00	23.90	22.50
48	15.00	12.90	11.50	94	26.50	24.40	23.00
50	15.50	13.40	12.00	96	27.00	24.90	23.50
52	16.00	13.90	12.50	98	27.50	25.40	24.00
54	16.50	14.40	13.00	100	28.00	25.90	24.50

0.6mm Board to Board Connectors

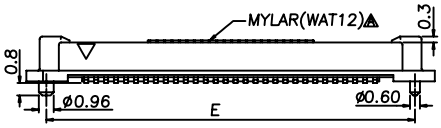
FX8-P09PC-xxx

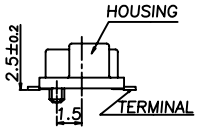
Circuits	A	B	C	D	E
40	11.4	14.7	17.0	18.6	16.2
60	17.4	20.7	23.0	24.6	22.2
80	23.4	26.7	29.0	30.6	28.2
90	26.4	29.7	32.0	33.6	31.2
100	29.4	32.7	35.0	36.6	34.2
120	35.4	38.7	41.0	42.6	40.2
140	41.4	44.7	47.0	48.6	46.2
160	47.4	50.7	53.0	54.6	52.2





MATERIALS
1.Housing:P.P.S.(UL 94V–0).Belge
2.Terminal:Phosphor Bronze
SPECIFICATION
1.Current Rating:0.4 A MAX.
2.Dielectric Withstanding Voltage:
300V AC R.M.S. for one minute.
3.Insulation Resistance:100M OHM Min AT 250V DC
4.Operating Temperature:–55C TO +85C

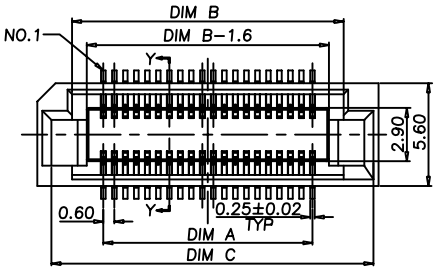


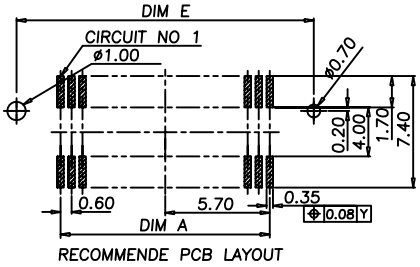


Mating Height
3.00

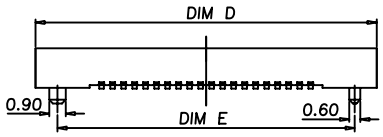
FX8-S21P-xxx

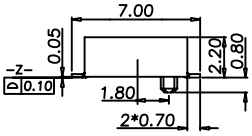
Circuits	A	B	C	D	E
40	11.4	14.8	17.05	18.6	16.2
60	17.4	20.8	23.05	24.6	22.2
80	23.4	26.8	29.05	30.6	28.2
90	26.4	29.8	32.05	33.6	31.2
100	29.4	32.8	35.05	36.6	34.2
120	35.4	38.8	41.05	42.6	40.2
140	41.4	44.8	47.05	48.6	46.2
160	47.4	50.8	53.05	54.6	52.2





MATERIALS
1.Housing:P.P.S.(UL 94V–0).Belge
2.Terminal:Phosphor Bronze
SPECIFICATION
1.Current Rating:0.4 A MAX.
2.Dielectric Withstanding Voltage:
300V AC R.M.S. for one minute.
3.Insulation Resistance:100M OHM Min AT 250V DC
4.Operating Temperature:–55C TO +85C





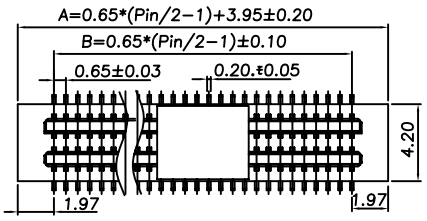
Mating Height
3.00

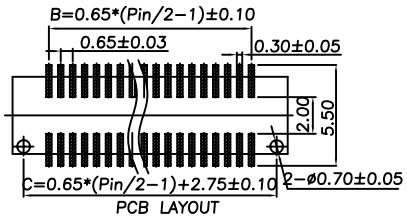
0.65mm Board to Board Connectors

NP065K-P30PC-xxx

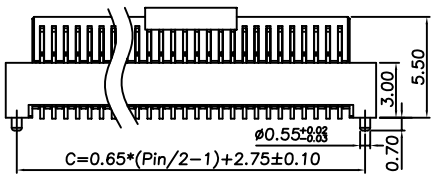
**Contact Dimension

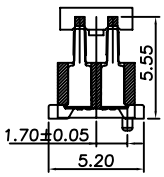
Contact	DIM. A	DIM. B	DIM. C
10	6.55	2.60	5.35
20	9.80	5.85	8.60
30	13.05	9.10	11.85
40	16.30	12.35	15.10
50	19.55	15.60	18.35
52	20.20	16.25	19.00

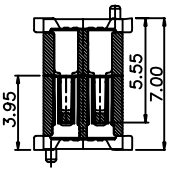




Specifications
1. Current Rating : 0.5A AC/DC
2. Voltage Rating : 60V AC/DC
3. Contact Resistance : 80m ohm. max.
4. Insulation Resistance : 1000M ohm. min.at 100V DC
5. Withstanding Voltage : 150V AC for one minute
6. Operating Temperature Range : –55°C to +85°C
Material and Plating
1.Housing : High Temp Platic UL94V–0
2.Contact : Phosphor Bronze
3.Plating :Gold Plating





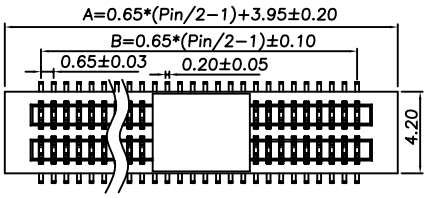


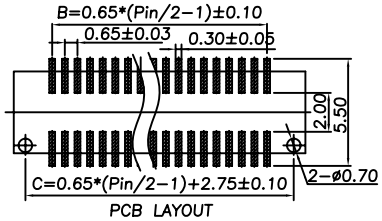
Mating Height Draw

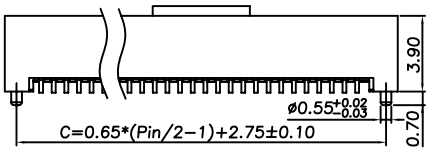
NP065K-S39PC-xxx

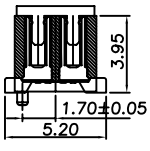
**Contact Dimension

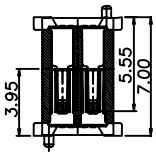
Contact	DIM. A	DIM. B	DIM. C
10	6.55	2.60	5.35
20	9.80	5.85	8.60
30	13.05	9.10	11.85
40	16.30	12.35	15.10
50	19.55	15.60	18.35
52	20.20	16.25	19.00











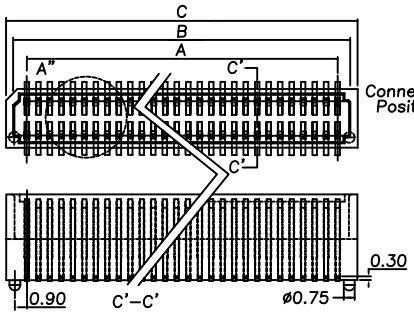
Mating Height Draw

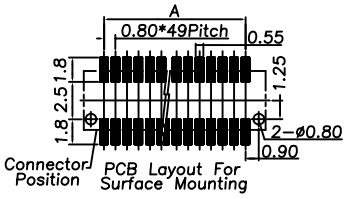
0.8mm Board to Board Connectors

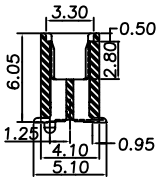
NP08-P605P-xxx

MATERIALS
1.Housing:Htn/Nylon 6T(UL 94V-0)
2.Contact:Phosphor Bronze

SPECIFICATION
1.Voltage:50V
2.Current:0.5A
3.Contact Resistance:40m ohm mix.
4.Dielectric Withstanding Voltage: 500V AC/1 min.
5.Insulation Resistance:100M OHM Min
6.Operating Temperature:-20C TO +105C





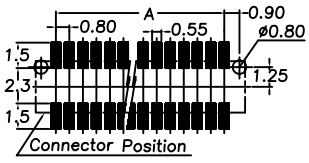


Mating Height
7.00

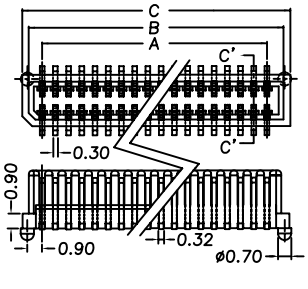
PART NO.	Dimension		
	A	B	C
NP08-P605P-010	3.20	4.80	6.00
NP08-P605P-012	4.00	5.60	6.80
NP08-P605P-014	4.80	6.40	7.60
NP08-P605P-016	5.60	7.20	8.40
NP08-P605P-018	6.40	8.00	9.20
NP08-P605P-020	7.20	8.80	10.00
NP08-P605P-022	8.00	9.60	10.80
NP08-P605P-024	8.80	10.40	11.60
NP08-P605P-026	9.60	11.20	12.40
NP08-P605P-028	10.40	12.00	13.20
NP08-P605P-030	11.20	12.80	14.00
NP08-P605P-032	12.00	13.60	14.80
NP08-P605P-034	12.80	14.40	15.60
NP08-P605P-036	13.60	15.20	16.40
NP08-P605P-038	14.40	16.00	17.20
NP08-P605P-040	15.20	16.80	18.00
NP08-P605P-042	16.00	17.60	18.80
NP08-P605P-044	16.80	18.40	19.60
NP08-P605P-046	17.60	19.20	20.40
NP08-P605P-048	18.40	20.00	21.20
NP08-P605P-050	19.20	20.80	22.00
NP08-P605P-052	20.00	21.60	22.80
NP08-P605P-054	20.80	22.40	23.60

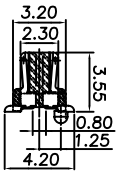
PART NO.	Dimension		
	A	B	C
NP08-P605P-056	21.60	23.20	24.40
NP08-P605P-058	22.40	24.00	25.20
NP08-P605P-060	23.20	24.80	26.00
NP08-P605P-062	24.00	25.60	26.80
NP08-P605P-064	24.80	26.40	27.60
NP08-P605P-066	25.60	27.20	28.40
NP08-P605P-068	26.40	28.00	29.20
NP08-P605P-070	27.20	28.80	30.00
NP08-P605P-072	28.00	29.60	30.80
NP08-P605P-074	28.80	30.40	31.60
NP08-P605P-076	29.60	31.20	32.40
NP08-P605P-078	30.40	32.00	33.20
NP08-P605P-080	31.20	32.80	34.00
NP08-P605P-082	32.00	33.60	34.80
NP08-P605P-084	32.80	34.40	35.60
NP08-P605P-086	33.60	35.20	36.40
NP08-P605P-088	34.40	36.00	37.20
NP08-P605P-090	35.20	36.80	38.00
NP08-P605P-092	36.00	37.60	38.80
NP08-P605P-094	36.80	38.40	39.60
NP08-P605P-096	37.60	39.20	40.40
NP08-P605P-098	38.40	40.00	41.20
NP08-P605P-100	39.20	40.80	42.00

NP08-S090P-xxx



PCB Layout For Surface Mounting



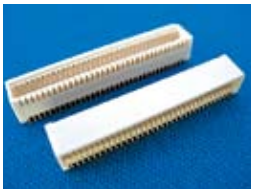


Mating Height
7.00

PART NO.	Dimension		
	A	B	C
NP08-S090P-010	3.20	4.80	5.70
NP08-S090P-012	4.00	5.60	6.50
NP08-S090P-014	4.80	6.40	7.30
NP08-S090P-016	5.60	7.20	8.10
NP08-S090P-018	6.40	8.00	8.90
NP08-S090P-020	7.20	8.80	9.70
NP08-S090P-022	8.00	9.60	10.50
NP08-S090P-024	8.80	10.40	11.30
NP08-S090P-026	9.60	11.20	12.10
NP08-S090P-028	10.40	12.00	12.90
NP08-S090P-030	11.20	12.80	13.70
NP08-S090P-032	12.00	13.60	14.50
NP08-S090P-034	12.80	14.40	15.30
NP08-S090P-036	13.60	15.20	16.10
NP08-S090P-038	14.40	16.00	16.90
NP08-S090P-040	15.20	16.80	17.70
NP08-S090P-042	16.00	17.60	18.50
NP08-S090P-044	16.80	18.40	19.30
NP08-S090P-046	17.60	19.20	20.10
NP08-S090P-048	18.40	20.00	20.90
NP08-S090P-050	19.20	20.80	21.70
NP08-S090P-052	20.00	21.60	22.50
NP08-S090P-054	20.80	22.40	23.30

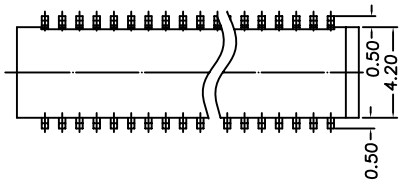
PART NO.	Dimension		
	A	B	C
NP08-S090P-056	21.60	23.20	24.10
NP08-S090P-058	22.40	24.00	24.90
NP08-S090P-060	23.20	24.80	25.70
NP08-S090P-062	24.00	25.60	26.50
NP08-S090P-064	24.80	26.40	27.30
NP08-S090P-066	25.60	27.20	28.10
NP08-S090P-068	26.40	28.00	28.90
NP08-S090P-070	27.20	28.80	29.70
NP08-S090P-072	28.00	29.60	30.50
NP08-S090P-074	28.80	30.40	31.30
NP08-S090P-076	29.60	31.20	32.10
NP08-S090P-078	30.40	32.00	32.90
NP08-S090P-080	31.20	32.80	33.70
NP08-S090P-082	32.00	33.60	34.50
NP08-S090P-084	32.80	34.40	35.30
NP08-S090P-086	33.60	35.20	36.10
NP08-S090P-088	34.40	36.00	36.90
NP08-S090P-090	35.20	36.80	37.70
NP08-S090P-092	36.00	37.60	38.50
NP08-S090P-094	36.80	38.40	39.30
NP08-S090P-096	37.60	39.20	40.10
NP08-S090P-098	38.40	40.00	40.90
NP08-S090P-100	39.20	40.80	41.70

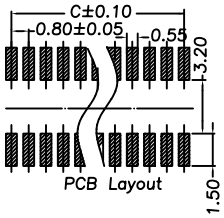
NP08G-PW420-xxx



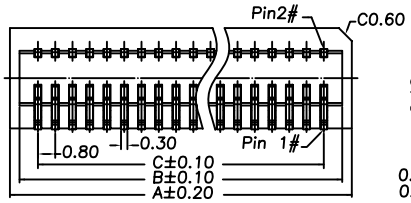
Contacts Dimensions

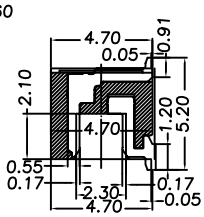
Position	A	B	C	Position	A	B	C
10	5.80	4.90	3.20	32	14.60	13.70	12.00
12	6.60	5.70	4.00	34	15.40	14.50	12.80
14	7.40	6.50	4.80	36	16.20	15.30	13.60
16	8.20	7.30	5.60	38	17.00	16.10	14.40
18	9.00	8.10	6.40	40	17.80	16.90	15.20
20	9.80	8.90	7.20	50	21.80	20.90	19.20
22	10.60	9.70	8.00	60	25.80	24.90	23.20
24	11.40	10.50	8.80	68	29.00	28.10	26.40
26	12.20	11.30	9.60	70	29.80	28.90	27.20
28	13.00	12.10	10.40	80	33.80	32.90	31.20
30	13.80	12.90	11.20	90	37.80	36.90	35.20
				100	41.80	40.90	39.20





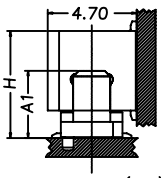
PCB Layout





Materials
Housing:Hi-Temp.Plastic
(UL 94V-0)
Conact :Copper Alloy
Plating:Gold Plating

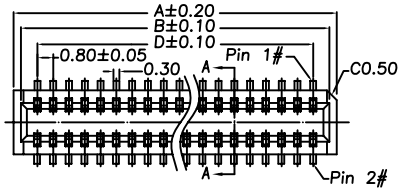
Specifications
Current Rating:0.5Amp .max.
Insulation Resistance:100Mohm min At 250V DC
Dielectric withstanding voltage:500V(r.m.s)
AC at 0.5mA for one minute
Contact Resistance:20mohm max
Temperature Range:-40°C to 105°C

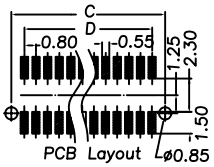


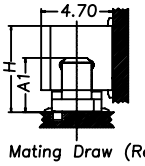
Mating Draw (Ref)

Male Height Dim A1	Mating Height Dim H
3.55	5.65
4.05	6.15

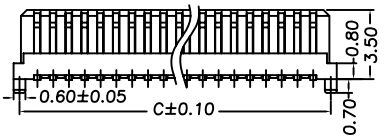
NP08G-SV145-xxx

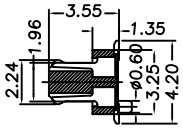






Mating Draw (Ref)





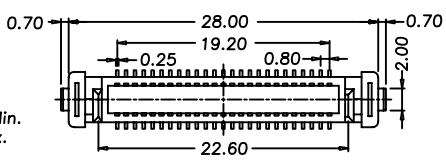
Contacts Dimensions

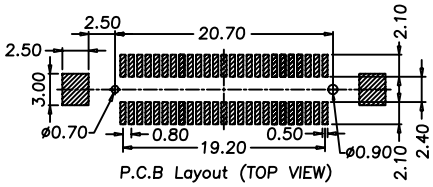
Position	A	B	C	D	Position	A	B	C	D
10	5.60	4.85	5.00	3.20	32	14.40	13.65	13.80	12.00
12	6.40	5.65	5.80	4.00	34	15.20	14.45	14.60	12.80
14	7.20	6.45	6.60	4.80	36	16.00	15.25	15.40	13.60
16	8.00	7.25	7.40	5.60	38	17.80	16.05	16.20	14.40
18	8.80	8.05	8.20	6.40	40	17.60	16.85	17.00	15.20
20	9.60	8.85	9.00	7.20	50	21.60	20.85	21.00	19.20
22	10.40	9.65	9.80	8.00	60	25.60	24.85	25.00	23.20
24	11.20	10.45	10.60	8.80	68	28.80	28.05	28.20	26.40
26	12.00	11.25	11.40	9.60	70	29.60	28.85	29.00	27.20
28	12.80	12.05	12.20	10.40	80	33.60	32.85	33.00	31.20
30	13.60	12.85	13.00	11.20	90	37.60	36.85	37.00	35.20
					100	41.60	40.85	41.00	39.20

Male Height Dim A1	Mating Height Dim H
3.55	5.65
4.05	6.15

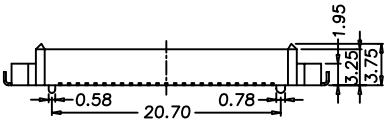
JKX-P21-050

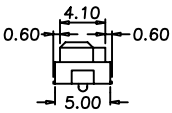
Sperification
Insulator Resistance:100M OHM Min.
Contact Resistance:70m ohm Max.
Temperature:−40°C TO +85°C





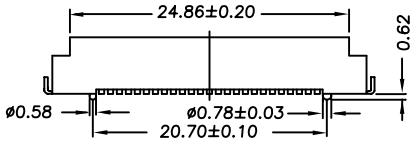
MATERIALS
Insulator:High Temperature Thermoplastic
UL 94V−0 Glass Filled
Contact:Phosphor Bronze
Contact Plated:Gold Over Nickel

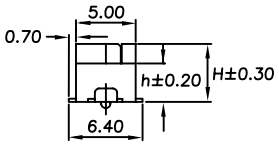




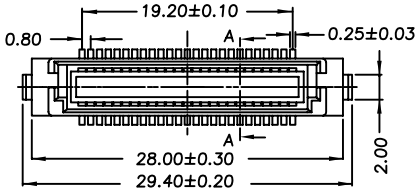
Mating Height
5.00

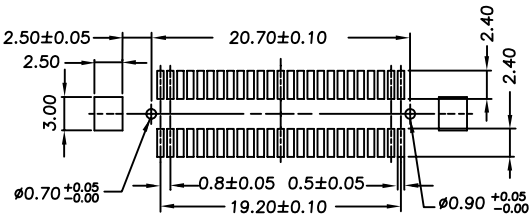
JKX-S30-050





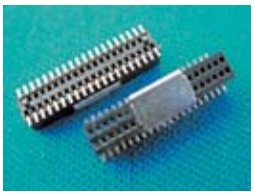
Stacking Height Code	h	H
JKX−S26−050	2.60	4.20
JKX−S33−050	3.30	4.90
JKX−S49−050	4.95	6.55

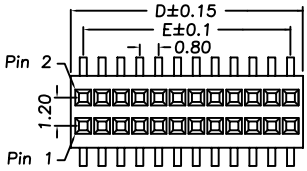


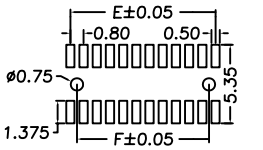


Mating Height
5.00

F8-V33PC-2Xxx



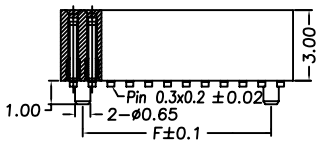


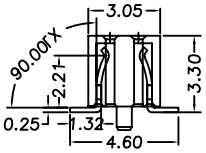


Recommended P.C.B Layout

MATERIAL
Insulator : NYLON 9T
Contact Pin : Phosphor Bronze

SPECIFICATION
Current Rate : 0.75 AMP
Insulation Resistance : 5000MΩMin.
Contact Resistance : 15mΩMax.
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C

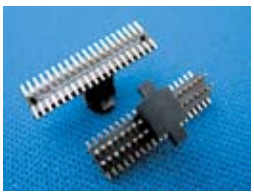


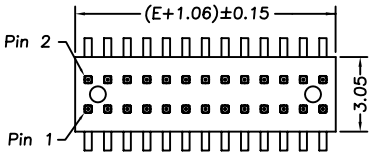


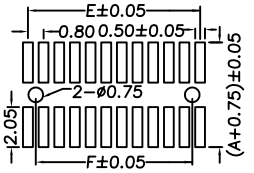
Mating Height
4.60

POLES	DIM D	DIM E	DIM F	POLES	DIM D	DIM E	DIM F
3	2.66	1.60	0.80	27	21.86	20.80	20.00
4	3.46	2.40	1.60	28	22.66	21.60	20.80
5	4.26	3.20	2.40	29	23.46	22.40	21.60
6	5.06	4.00	3.20	30	24.26	23.20	22.40
7	5.86	4.80	4.00	31	25.06	24.00	23.20
8	6.66	5.60	4.80	32	25.86	24.80	24.00
9	7.46	6.40	5.60	33	26.66	25.60	24.80
10	8.26	7.20	6.40	34	27.46	26.40	25.60
11	9.06	8.00	7.20	35	28.26	27.20	26.40
12	9.86	8.80	8.00	36	29.06	28.00	27.20
13	10.66	9.60	8.80	37	29.86	28.80	28.00
14	11.46	10.40	9.60	38	30.66	29.60	28.80
15	12.26	11.20	10.40	39	31.46	30.40	29.60
16	13.06	12.00	11.20	40	32.26	31.20	30.40
17	13.86	12.80	12.00	41	33.06	32.00	31.20
18	14.66	13.60	12.80	42	33.86	32.80	32.00
19	15.46	14.40	13.60	43	34.66	33.60	32.80
20	16.26	15.20	14.40	44	35.46	34.40	33.60
21	17.06	16.00	15.20	45	36.26	35.20	34.40
22	17.86	16.80	16.00	46	37.06	36.00	35.20
23	18.66	17.60	16.80	47	37.86	36.80	36.00
24	19.46	18.40	17.60	48	38.66	37.60	36.80
25	20.26	19.20	18.40	49	39.46	38.40	37.60
26	21.06	20.00	19.20	50	40.26	39.20	38.40

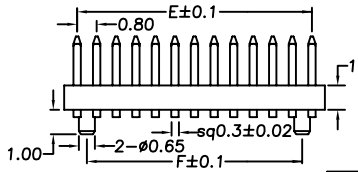
H8-V13PC-2Xxx

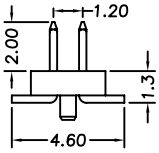






Recommended P.C.B Layout





Mating Height
4.60

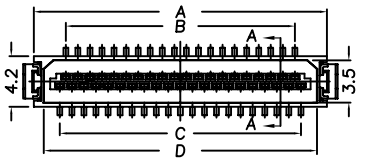
MATERIAL
Insulator : NYLON 9T
Contact Pin : Phosphor Bronze
SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin.
Contact Resistance : 15mΩMax.
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C

POLES	DIM E	DIM F	POLES	DIM E	DIM F	POLES	DIM E	DIM F
3	1.60	0.80	19	14.40	13.60	35	27.20	26.40
4	2.40	1.60	20	15.20	14.40	36	28.00	27.20
5	3.20	2.40	21	16.00	15.20	37	28.80	28.00
6	4.00	3.20	22	16.80	16.00	38	29.60	28.80
7	4.80	4.00	23	17.60	16.80	39	30.40	29.60
8	5.60	4.80	24	18.40	17.60	40	31.20	30.40
9	6.40	5.60	25	19.20	18.40	41	32.00	31.20
10	7.20	6.40	26	20.00	19.20	42	32.80	32.00
11	8.00	7.20	27	20.80	20.00	43	33.60	32.80
12	8.80	8.00	28	21.60	20.80	44	34.40	33.60
13	9.60	8.80	29	22.40	21.60	45	35.20	34.40
14	10.40	9.60	30	23.20	22.40	46	36.00	35.20
15	11.20	10.40	31	24.00	23.20	47	36.80	36.00
16	12.00	11.20	32	24.80	24.00	48	37.60	36.80
17	12.80	12.00	33	25.60	24.80	49	38.40	37.60
18	13.60	12.80	34	26.40	25.60	50	39.20	38.40

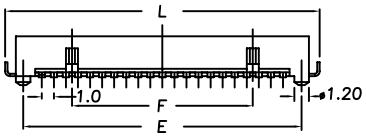
1.0mm Board to Board Connectors

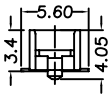
DF9-P-xx

PART NO.	A	B	C	D	E	F	L
DF9-P-31	19.30	14.00	15.00	17.65	18.10	10.00	21.10
DF9-P-41	24.30	19.00	20.00	22.65	23.10	15.00	26.10



Mating Height
4.30





SPECIFICATIONS:

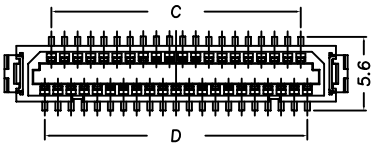
Material
1. INSULATOR: LCP UL94-V0
2. TERMINAL: PHOSPHOR BRONZE
3. EAR: BRASS

Plating
1.TERMINAL: Tin Plating
2.EAR: Tin Plating

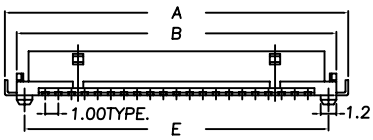
Electrical
1.Current rating: 0.5A Per contact
2.Volitage rating: 150V AC
3.Dielectric withstanding voltage: 250V AC
4.Insulation resistance: 500 Milli ohms min
5.Contact resistance: 50 milli ohms Max

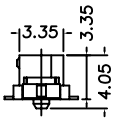
DF9-S-xx

PART NO.	A	B	C	D	E
DF9-S-31	21.15	19.35	14.00	15.00	18.15
DF9-S-41	26.15	24.35	19.00	20.00	23.15



Mating Height
4.30





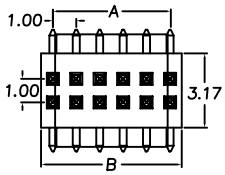
SPECIFICATIONS:

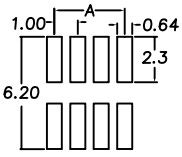
Material
1. INSULATOR: LCP UL94-V0
2. TERMINAL: PHOSPHOR BRONZE
3. EAR: BRASS

Plating
1.TERMINAL: Tin Plating
2.EAR: Tin Plating

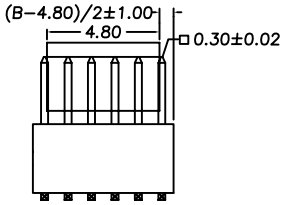
Electrical
1.Current rating: 0.5A Per contact
2.Volitage rating: 150V AC
3.Dielectric withstanding voltage: 250V AC
4.Insulation resistance: 500 Milli ohms min
5.Contact resistance: 50 milli ohms Max

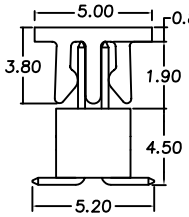
H10-V45X19C-2Xxx





Recommended PCB Layout

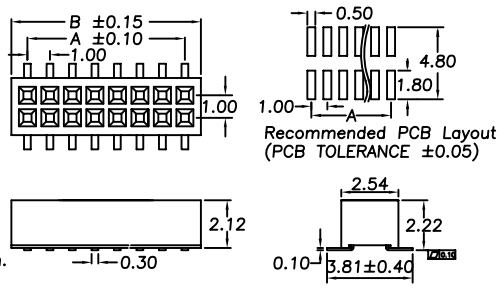




SPECIFICATIONS
Current Rating:1 Amp
Insulator resistance:5000 Megohms min.
Dielectric withstanding:AC 500 V
Operating Temperature:−40 C~ 105 C
Max Processing Temp:230 for 30 seconds
Insulator Material:High Temperature Thermoplastic,UL 94V-0(L.C.P)
Color:Black
Finish:Tin,Gold plated

No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B
6	2.00	3.00	54	26.00	27.00
8	3.00	4.00	56	27.00	28.00
10	4.00	5.00	58	28.00	29.00
12	5.00	6.00	60	29.00	30.00
14	6.00	7.00	62	30.00	31.00
16	7.00	8.00	64	31.00	32.00
18	8.00	9.00	66	32.00	33.00
20	9.00	10.00	68	33.00	34.00
22	10.00	11.00	70	34.00	35.00
24	11.00	12.00	72	35.00	36.00
26	12.00	13.00	74	36.00	37.00
28	13.00	14.00	76	37.00	38.00
30	14.00	15.00	78	38.00	39.00
32	15.00	16.00	80	39.00	40.00
34	16.00	17.00	82	40.00	41.00
36	17.00	18.00	84	41.00	42.00
38	18.00	19.00	86	42.00	43.00
40	19.00	20.00	88	43.00	44.00
42	20.00	21.00	90	44.00	45.00
44	21.00	22.00	92	45.00	46.00
46	22.00	23.00	94	46.00	47.00
48	23.00	24.00	96	47.00	48.00
50	24.00	25.00	98	48.00	49.00
52	25.00	26.00	100	49.00	50.00

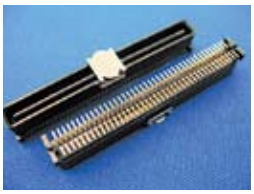
F10-V22X-2Xxx

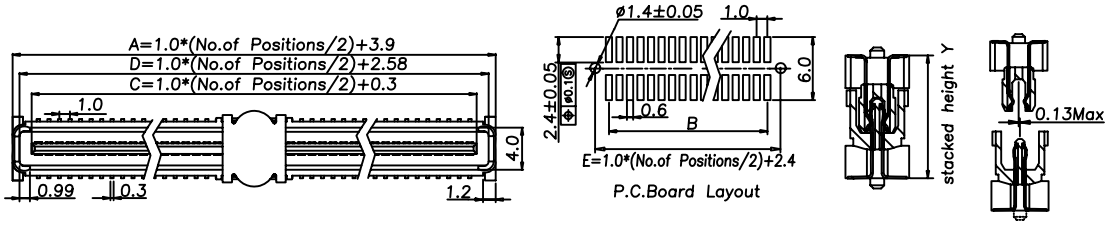


SPECIFICATIONS
Current Rating:1 Amp
Insulator resistance:5000 Megohms min.
Dielectric withstanding:AC 500 V
Operating Temperature:−40 C~ 105 C
Contact Material:Phosphor Bronze.
Thermoplastic,UL 94V−0(L.C.P)
Color:Black

No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B
8	3.00	4.43	40	19.00	20.43	72	35.00	36.43
10	4.00	5.43	42	20.00	21.43	74	36.00	37.43
12	5.00	6.43	44	21.00	22.43	76	37.00	38.43
14	6.00	7.43	46	22.00	23.43	78	38.00	39.43
16	7.00	8.43	48	23.00	24.43	80	39.00	40.43
18	8.00	9.43	50	24.00	25.43	82	40.00	41.43
20	9.00	10.43	52	25.00	26.43	84	41.00	42.43
22	10.00	11.43	54	26.00	27.43	86	42.00	43.43
24	11.00	12.43	56	27.00	28.43	88	43.00	44.43
26	12.00	13.43	58	28.00	29.43	90	44.00	45.43
28	13.00	14.43	60	29.00	30.43	92	45.00	46.43
30	14.00	15.43	62	30.00	31.43	94	46.00	47.43
32	15.00	16.43	64	31.00	32.43	96	47.00	48.43
34	16.00	17.43	66	32.00	33.43	98	48.00	49.43
36	17.00	18.43	68	33.00	34.43	100	49.00	50.43
38	18.00	19.43	70	34.00	35.43			

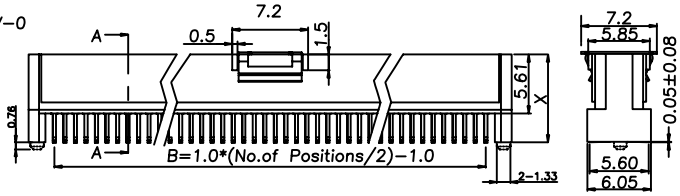
NP10-PxxxPC-xxx





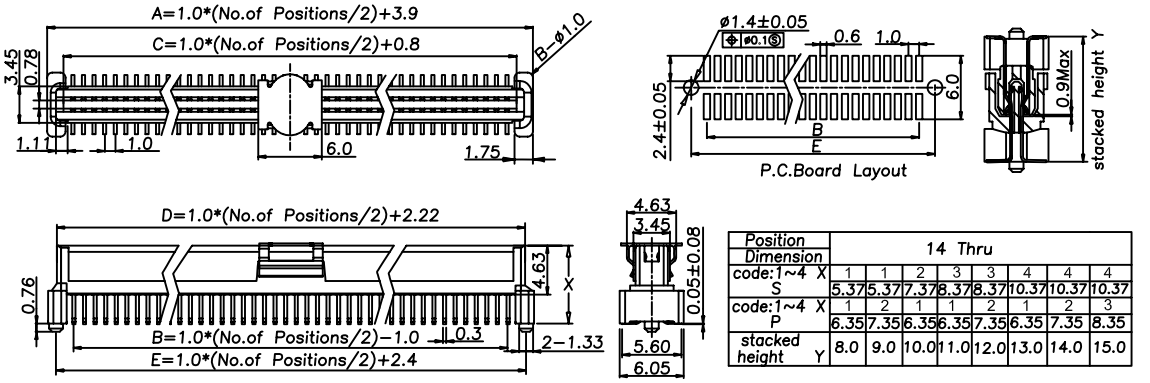
Material and Plating
1.Housing : High Temp Platic UL94V−0
2.Contact : Phosphor Bronze
3.Pld:Metal.

Specifications
1. Current Rating : 0.5AMP.
2. Voltage Rating : 60V AC/DC
3. Withstanding Voltage : 500V AC for 1 minute.
4. Operating Temperature Range : −40°C to +105°C



Position / Dimension	14 Thru							
code:1~4 X	1	1	2	3	3	4	4	4
S	5.37	5.37	7.37	8.37	8.37	10.37	10.37	10.37
code:1~4 X	1	2	1	1	2	1	2	3
P	6.35	7.35	6.35	6.35	7.35	6.35	7.35	8.35
stacked height Y	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0

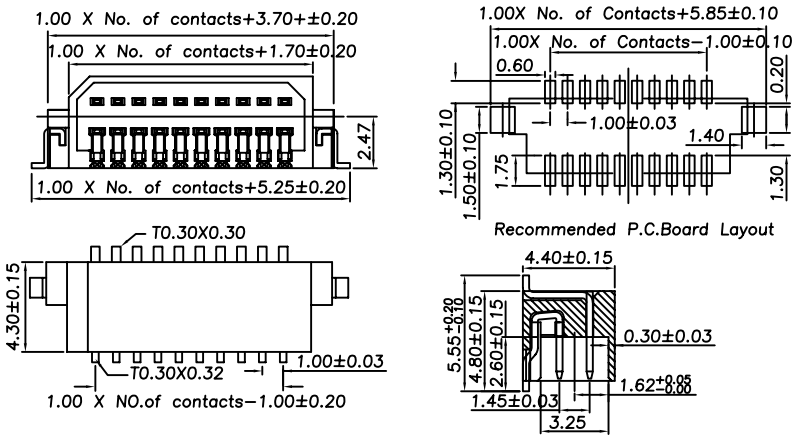
NP10-SxxxPC-xxx



Position / Dimension	14 Thru							
code:1~4 X	1	1	2	3	3	4	4	4
S	5.37	5.37	7.37	8.37	8.37	10.37	10.37	10.37
code:1~4 X	1	2	1	1	2	1	2	3
P	6.35	7.35	6.35	6.35	7.35	6.35	7.35	8.35
stacked height Y	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0

NP1014-PW-xx

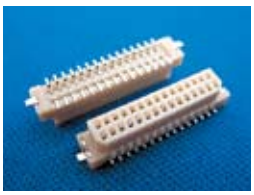
No. of Pins per Row 05~15



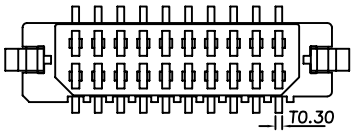
NOTES:
1.UNLESS OTHERWISE SPECIFIED, ALL RADIUSES
2.MATERIAL: NYLON 6T, 30% GLASS FIBER FILLED, UL94V−0 RATED, NATURAL COLOR.
3.BURR: 0.08mm (MAX.)
4.WARPAGE: 0.25mm (MAX.)
5.PART SHOULD BE FREE OF VOIDS, SINKS, AND SHORTS.
6.LOGO, MARKING, AND CAVITY NO. SHOULD BE CLEAR, AND THEIR HEIGHT SHOULD BE LOWER THAN THE SURFACE.

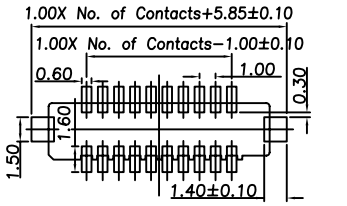
8

NP1014-SV-xx

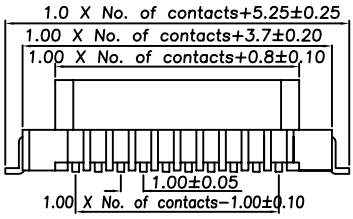


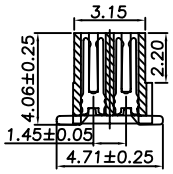
No. of Pins per Row 05~15





Recommended P.C.Board Layout



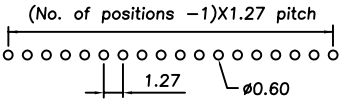


NOTES:
1.UNLESS OTHERWISE SPECIFIED, ALL RADIUSES
2.MATERIAL: NYLON 6T, 30% GLASS FIBER FILLED, UL94V−0 RATED, NATURAL COLOR.
3.BURR: 0.08mm (MAX.)
4.WARPAGE: 0.25mm (MAX.)
5.PART SHOULD BE FREE OF VOIDS, SINKS, AND SHORTS.
6.LOGO, MARKING, AND CAVITY NO. SHOULD BE CLEAR, AND THEIR HEIGHT SHOULD BE LOWER THAN THE SURFACE.

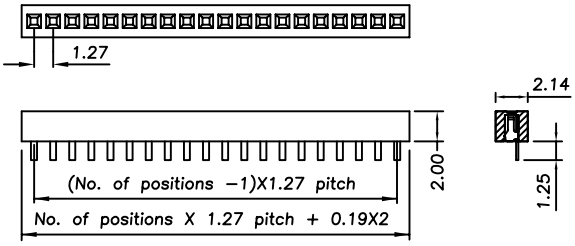
1.27X1.27mm Board to Board Connectors

YA-D20-1Xxx

SPECIFICATIONS
* Contact Material: Phosphor bronze
* Housing: L.C.P (UL 94 V−0)
* Current Rating : 1 Amps
* Insulator resistance: 5000 Megohms min.
* Dielectric withstanding: AC 500 V
* Operating Temperature: −40°−+105°C
* Max Processing Temp: 230° for 30~60 seconds (260° for 10 seconds)

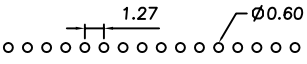


Recommended P.C.B. Layout

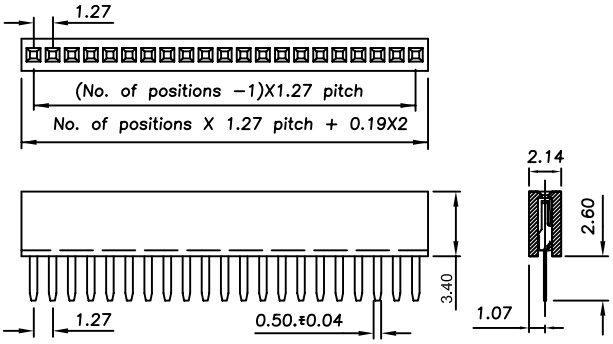


YA-D34-1Xxx

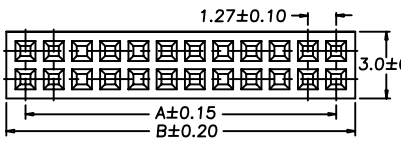
SPECIFICATIONS
* Current Rating : 1 Amps
* Insulator resistance: 5000 Megohms min.
* Dielectric withstanding: AC 500 V
* Operating Temperature: −40°−+105°C
* Max Processing Temp: 230° for 30~60 seconds (260° for 10 seconds)
* Contact Material: Phosphor bronze
* Housing: L.C.P (UL 94 V−0)

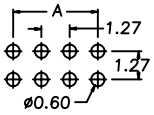


PCB LAYOUT

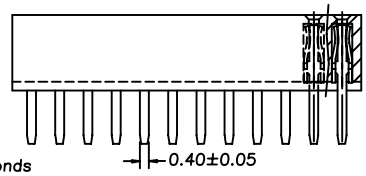


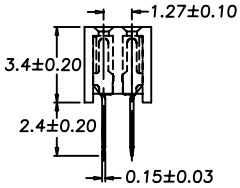
YA-D34-2Xxx





Recommended PCB Layout



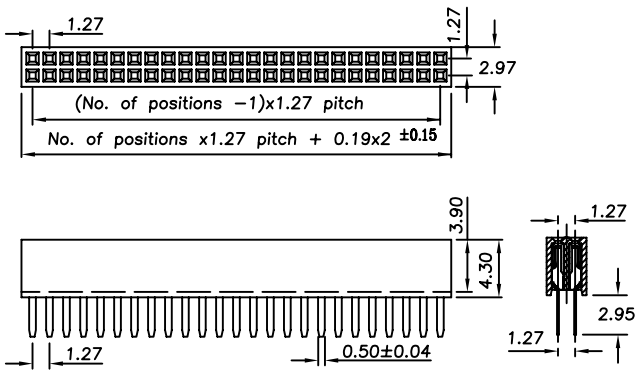


SPECIFICATIONS
* Current Rating : 1 Amps
* Insulator resistance: 5000 Megohms min.
* Dielectric withstanding: AC 500 V
* Operating Temperature: −40°−+105°C
* Max Processing Temp: 230° for 30~60 seconds (260° for 10 seconds)
* Contact Material: Phosphor bronze
* Housing: L.C.P (UL 94 V−0)

No.of Contacts	DIMENSIONS A	DIMENSIONS B	No.of Contacts	DIMENSIONS A	DIMENSIONS B
4	1.27	3.00	54	33.02	34.75
6	2.54	4.27	56	34.29	36.02
8	3.81	5.54	58	35.56	37.29
10	5.08	6.81	60	36.83	38.56
12	6.35	8.08	62	38.10	39.83
14	7.62	9.35	64	39.37	41.10
16	8.89	10.62	66	40.64	42.37
18	10.16	11.89	68	41.91	43.64
20	11.43	13.16	70	43.18	44.91
22	12.70	14.43	72	44.45	46.18
24	13.97	15.70	74	45.72	47.45
26	15.24	16.97	76	46.99	48.72
28	16.51	18.24	78	48.26	49.99
30	17.78	19.51	80	49.53	51.26
32	19.05	20.78	82	50.80	52.53
34	20.32	22.05	84	52.07	53.80
36	21.59	23.32	86	53.34	55.07
38	22.86	24.59	88	54.61	56.34
40	24.13	25.86	90	55.88	57.61
42	25.40	27.13	92	57.15	58.88
44	26.67	28.40	94	58.42	60.15
46	27.94	29.67	96	59.69	61.42
48	29.21	30.94	98	60.96	62.69
50	30.48	32.21	100	62.23	63.96
52	31.75	33.48			

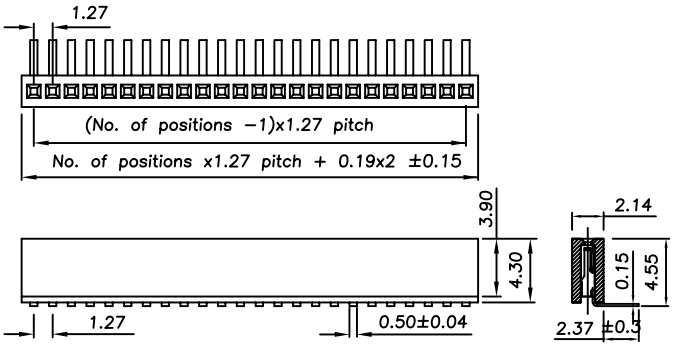
YA-D43-2Xxx

SPECIFICATIONS
CONTACT RESISTANCE: 20m OHMS MAX. AT DC 100mA
INSULATOR RESISTANCE: 1000M OHMS MIN. AT DC 500V
CURRENT RATING: 1 AMP
DIELECTRIC WITHSTANDING
VOLTAGE: AC 500V FOR 1 MINUTE
OPERATING TEMPERATURE: −55°C−+105°C
CONTACT: PHOSPHOR BRANZE
HOUSING: L.C.P.(Black Color)



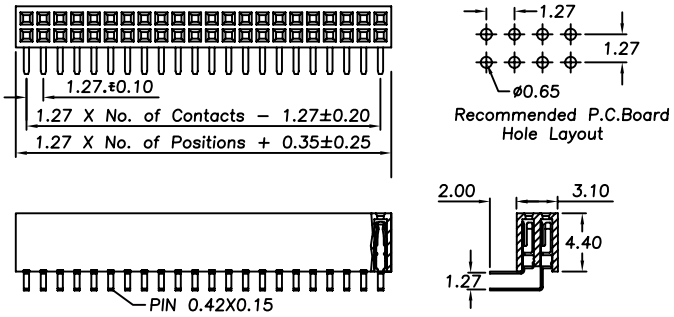
YA-R43-1Xxx

SPECIFICATIONS
CONTACT RESISTANCE: 20m OHMS MAX. AT DC 100mA
INSULATOR RESISTANCE: 1000M OHMS MIN. AT DC 500V
CURRENT RATING: 1 AMP
DIELECTRIC WITHSTANDING
VOLTAGE: AC 500V FOR 1 MINUTE
OPERATING TEMPERATURE: −55°C−+105°C
CONTACT: PHOSPHOR BRANZE
HOUSING: L.C.P.(Black Color)



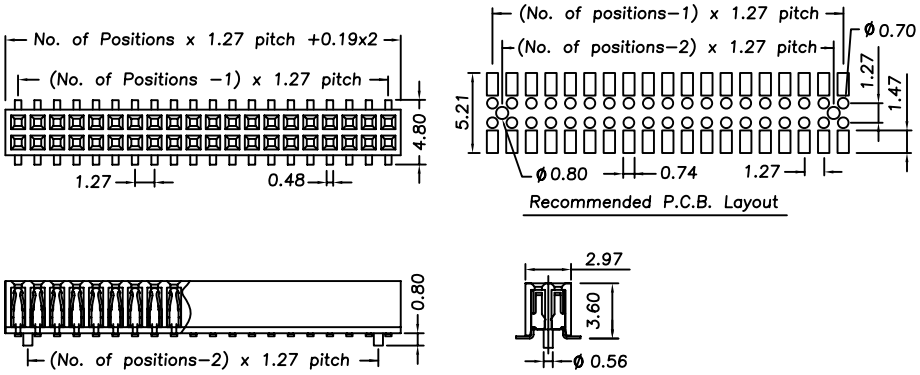
YA-R44-2Xxx

Specifications
Current Rating: 1Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 300V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
NYLON−6T



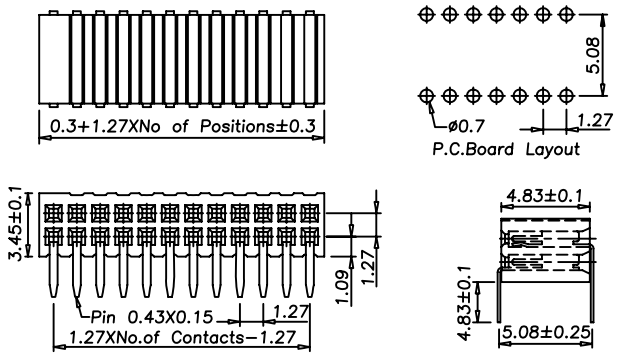
YA-V36P-2Xxx

SPECIFICATIONS
* Current Rating : 1 Amps
* Insulator resistance: 5000 Megohms min.
* Dielectric withstanding: AC 500 V
* Operating Temperature: −40°−+105°C
* Max Processing Temp: 230° for 30~60 seconds (260° for 10 seconds)
* Contact Material: Phosphor bronze
* Housing: L.C.P (UL 94 V−0)



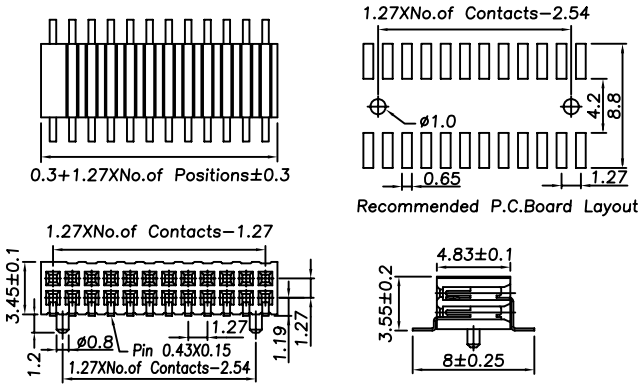
YA-S-2Xxx

Specifications
Current Rating: 1Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: AC 500V
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
NYLON−6T



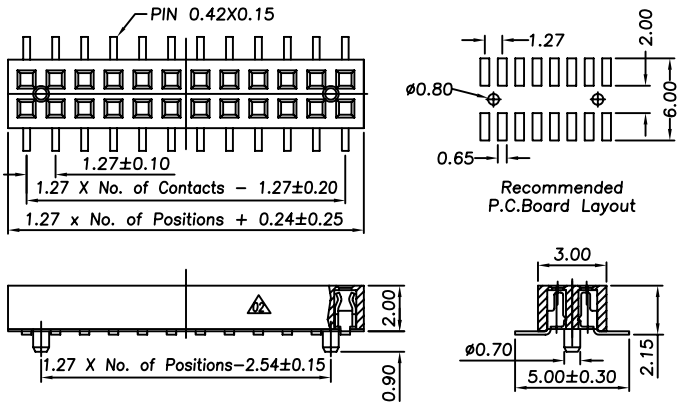
YA-MX-2Xxx

Specifications
Current Rating : 1 Amps
Insulator Resistance : 1000 Megohms min.
Contact Resistance : 20 m ohms max.
Dielectric Withstanding : AC 500V
Operating Temperature : −40°C ~ +105°C
Max. Processing Temp. : 230°C for 30~60 Seconds
(260°C for Seconds)
Contact Material : Phosphor Bronze
Insulator Material : Polyester, UL 94V−0
Standard : Nylon−6T
Contact Plated : Full Gold, Full Tin, Selective Plated



YA-V22P-2Xxx

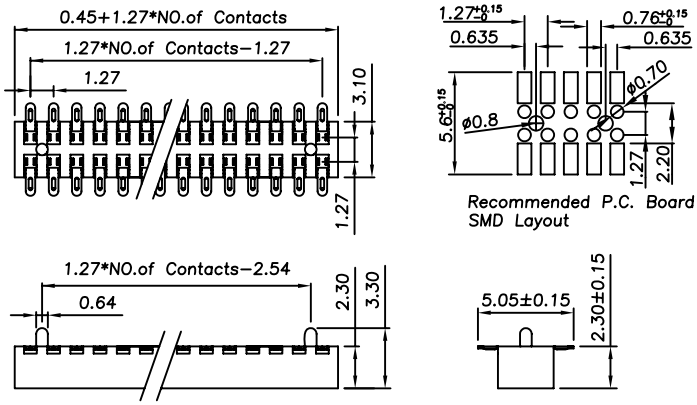
Specifications
Current Rating: 1Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 300V AC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0



YA-Z23P-2Xxx

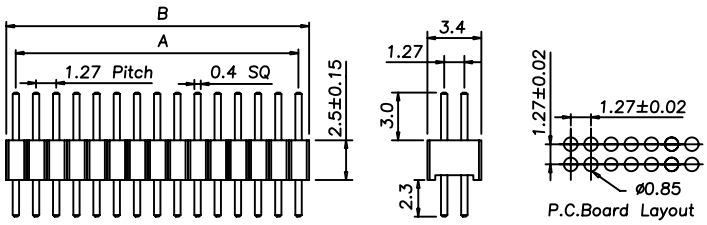
MATERIALS:
INSULATOR:NYLON−6T,UL94V−0
COLOUR−BLACK
CONTACTS:BRASS,GOLD FLASH
OVER NICKEL PLATED CONTACT AREAS,
TIN PLATED SOLDER TAILS.

ELECTRICAL:
CURRENT RATING:1AMP.
INSULATION RESISTANCE:30MILLIONHMS MAX.
DIELECTRIC WITHSTANDING:500VAC
OPERATING TEMPERATURE:−40°C~+105°C
MAX.PROCESING TEMPERATURE: 230°FOR30/60SEC.
260°FOR10SEC.



PA-D25-2Xxx

Conteract:
Contact: Brass.
Insuiator: Nylon 6T.
Finish: Gold flash plated over nickel.

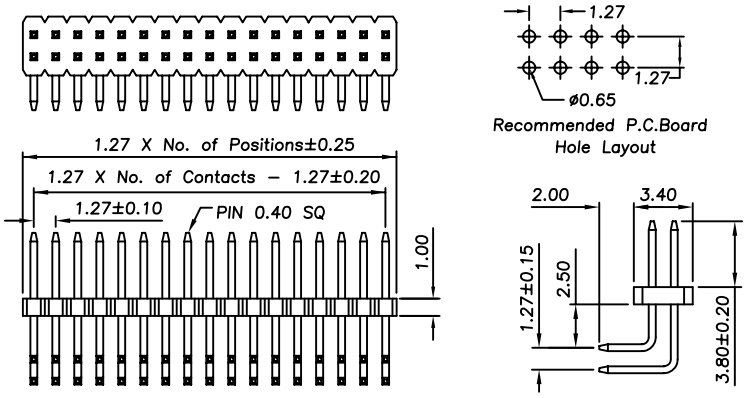


A=1.27 X (No of Positions−1)
B=A+1.27±0.3

PA-R10-2Xxx

Specifications
Current Rating: 1Amp
Insulation Resistance: 1000M OHM Min.
Dielectric Withstanding: 300V AC/DC
Contact Resistance: 20m ohm Max.
Operating Temperature:−40°C to +105°C

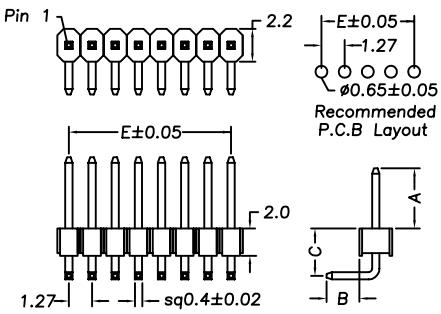
Materials
Contact Material: Copper Alloy
Insulation Material: Polyester, UL 94V−0
Nylon 6T



PA-R20-1Xxx

Specifications
Current Rating: 1Amp
Insulation Resistance: 1000M OHM Min.
Dielectric Withstanding: 300V AC/DC
Contact Resistance: 20m ohm Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Copper Alloy
Insulation Material: Polyester, UL 94V−0
Nylon 6T

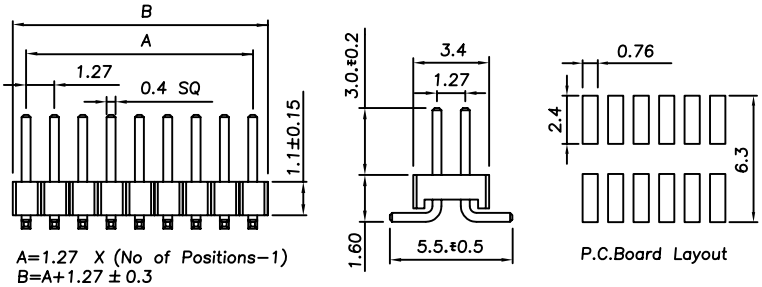


POLES	DIM E	POLES	DIM E
2	1.27	18	21.59
3	2.54	19	22.86
4	3.81	20	24.13
5	5.08	21	25.40
6	6.35	22	26.67
7	7.62	23	27.94
8	8.89	24	29.21
9	10.16	25	30.48
10	11.43	26	31.75
11	12.70	27	33.02
12	13.97	28	34.29
13	15.24	29	35.56
14	16.51	30	36.83
15	17.78	31	38.10
16	19.05	32	39.37
17	20.32	33	40.64

PA-V16X-2Xxx

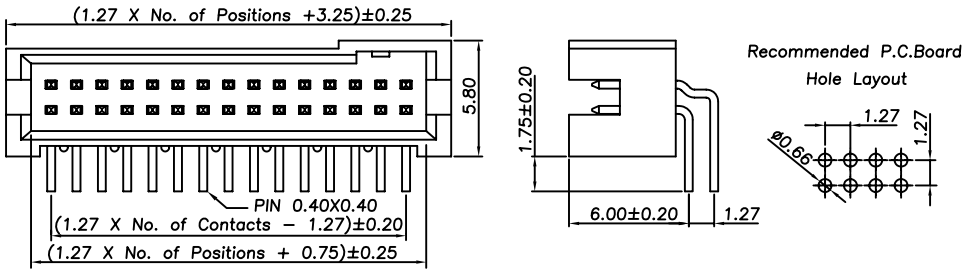
Specifications
Current Rating: 1Amp
Insulation Resistance: 1000M OHM Min.
Dielectric Withstanding: 300V AC/DC
Contact Resistance: 20m ohm Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Copper Alloy
Insulation Material: Polyester, UL 94V−0
Nylon 6T



A=1.27 X (No of Positions−1)
B=A+1.27 ± 0.3

PAB-R-2Xxx

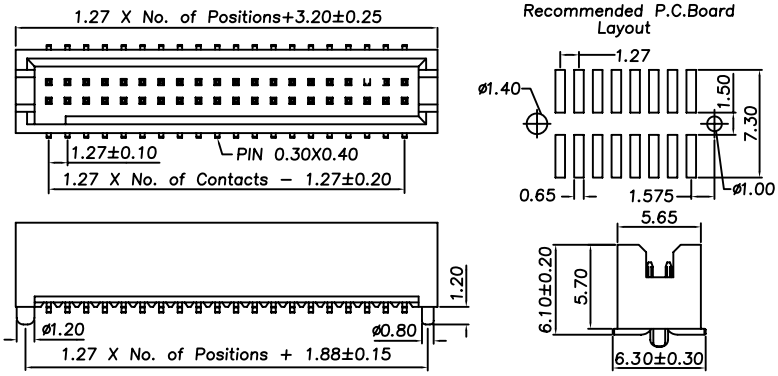


Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
Nylon 6T(Processing temp.260°c,10sec)

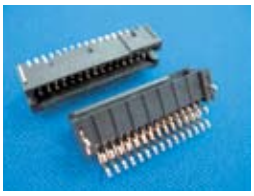
Specifications
Current Rating: 1Amp
Insulation Resistance: 1000M OHM Min.
Dielectric Withstanding: 300V AC
Contact Resistance: 20m ohm Max.
Operating Temperature:−40°C to +105°C

PAB-V16P-2Xxx

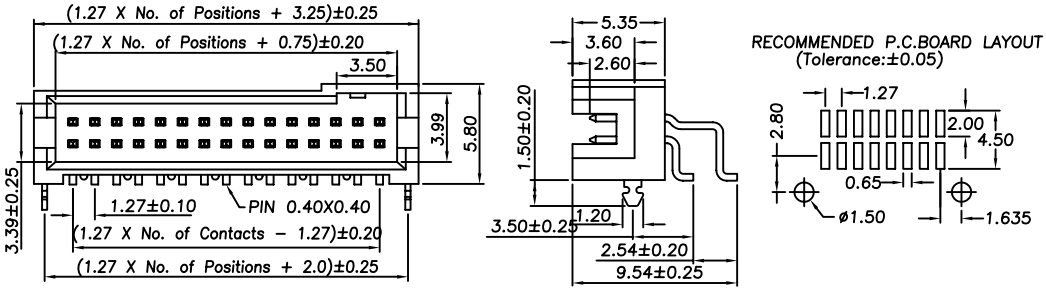
Specifications
Current Rating: 1Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 300V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Copper Alloy
Insulation Material: Polyester, UL 94V−0
Nylon 6T



PAB-WZ-2Xxx

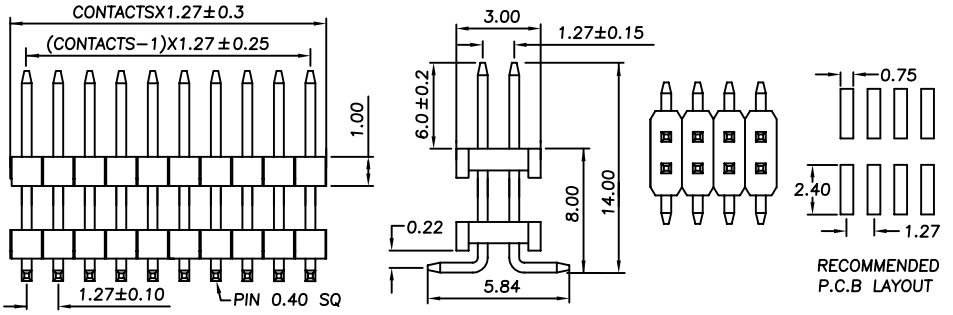


Specifications
Current Rating: 1Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 300V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Copper Alloy
Insulation Material: Polyester, UL 94V−0
Nylon 6T



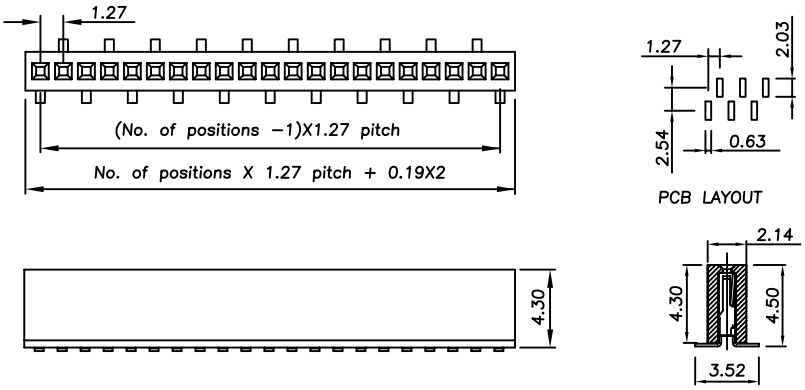
PAS-V080X60-2Xxx

Specifications
Current Rating: 1Amp
Insulation Resistance: 5000Mega ohms Min.
Dielectric Withstanding: 600 VAC min
Contact Resistance: 30mΩ Max.
Operating Temperature:−55°C to +105°C
Materials
Contact Material: Copper Alloy
Insulation Material: Thermoplastic, UL 94V−0

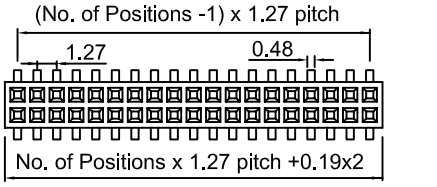


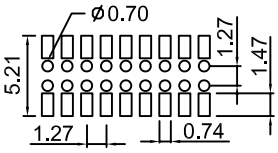
YA-V45X-1XxxL

SPECIFICATIONS
* Current Rating : 1 Amps
* Insulator resistance: 5000 Megohms min.
* Dielectric withstanding: AC 500 V
* Operating Temperature: −40°−+105°C
* Max Processing Temp: 230° for 30~60 seconds (260° for 10 seconds)
* Contact Material: Phosphor bronze
* Housing: L.C.P (UL 94 V−0)

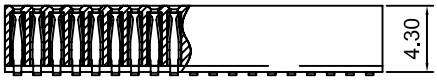


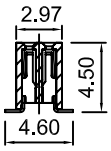
YA-V45X-2Xxx





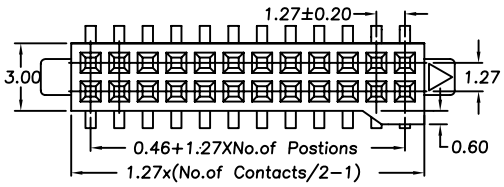
Recommended P.C.B. Layout

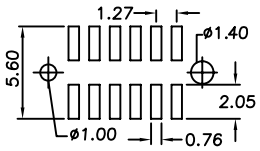




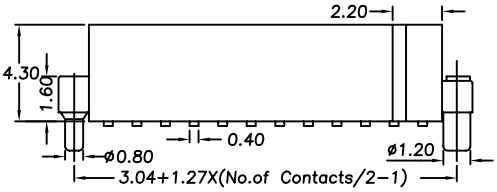
SPECIFICATIONS
* Current Rating : 1 Amps
* Insulator resistance: 5000 Megohms min.
* Dielectric withstanding: AC 500 V
* Operating Temperature: −40°−+105°C
* Max Processing Temp: 230° for 30~60 seconds (260° for 10 seconds)
* Contact Material: Phosphor bronze
* Housing: L.C.P (UL 94 V−0)

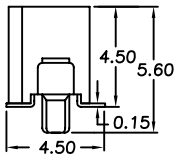
YAB-V45P-2Xxx





Recommended P.C.Board Layout

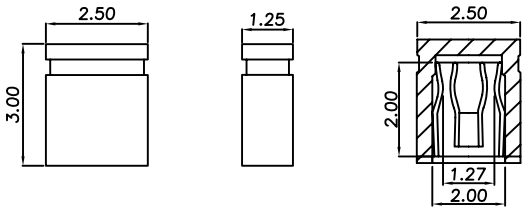




SPECIFICATIONS
Current Rating: 1 Amp
Insulator resistance: 5000 Megohms min.
Contacts resistance: 20 m ohms max.
Dielectric withstanding: AC 500 V
Operating Temperature: −40°~+105°C
Max Processing Temp: 230° for 30 seconds
Contact Material: Phosphor bronze
High Temperature
Insulator Material: Thermoplstic,UL 94V−0

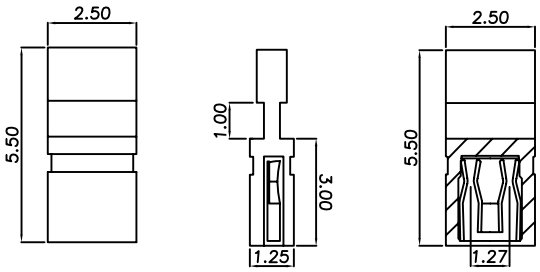
YJ-A-03

Specifications
Current Rating: 1Amp
Insulation Resistance: 5000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−55°C to +105°C
Material:
Contacts: Phosphor Bronze
Housing:30% Glass Fillcd PBT UL 94V−0



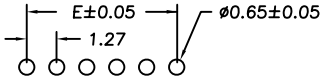
YJ-H-03

Specifications
Current Rating: 1Amp
Insulation Resistance: 5000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−55°C to +105°C
Material:
Contacts: Phosphor Bronze
Housing:30% Glass Fillcd PBT UL 94V−0

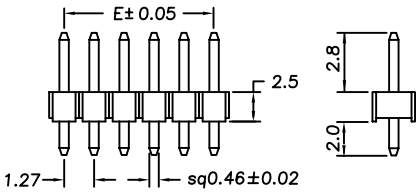


1.27X2.54mm Board to Board Connectors

P-D25-1Xxx



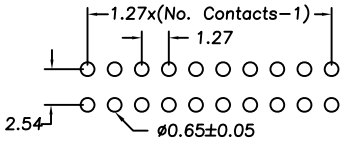
Recommended P.C.B Layout



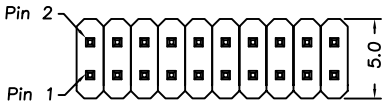
MATERIAL
Insulator : NYLON 46
Contact Pin : Brass
SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute

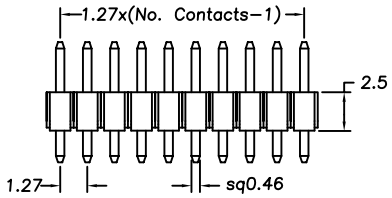
POLES	DIM E	POLES	DIM E
2	1.27	18	21.59
3	2.54	19	22.86
4	3.81	20	24.13
5	5.08	21	25.40
6	6.35	22	26.67
7	7.62	23	27.94
8	8.89	24	29.21
9	10.16	25	30.48
10	11.43	26	31.75
11	12.70	27	33.02
12	13.97	28	34.29
13	15.24	29	35.56
14	16.51	30	36.83
15	17.78	31	38.10
16	19.05	32	39.37
17	20.32	33	40.64

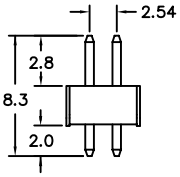
P-D25-2Xxx



Recommended P.C.B Layout

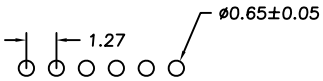




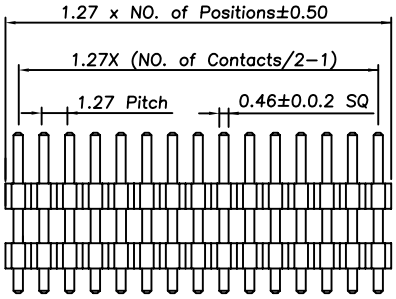


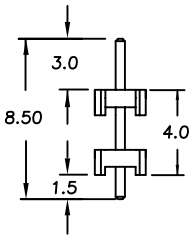
MATERIAL
Insulator : NYLON 46
Contact Pin : Brass
SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute

PS-D0403015-1Xxx



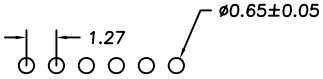
Recommended P.C.B Layout



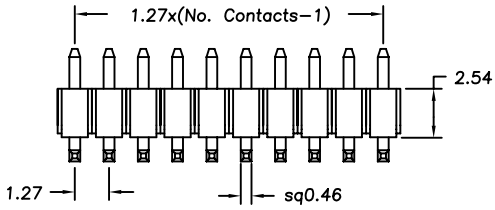


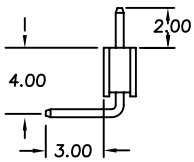
Conteract:
Contact:Brass.
Insuiator:Nylon 6T.
Finish:Gold flash plated over nickel.

P-R252030-1Xxx



Recommended P.C.B Layout

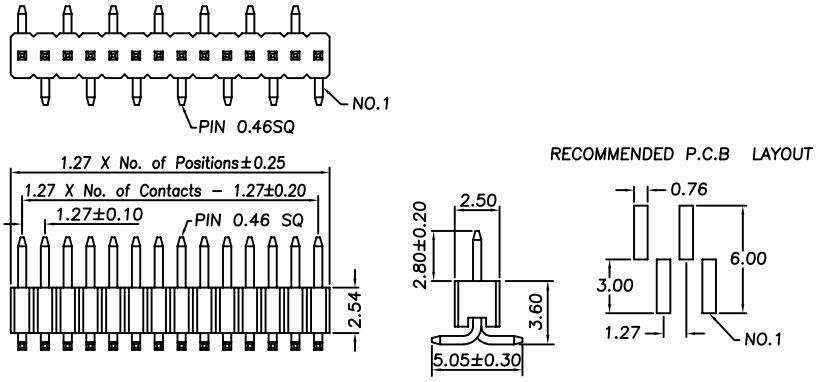




Conteract:
Contact:Brass.
Insuiator:Nylon 6T.
Finish:Gold flash plated over nickel.

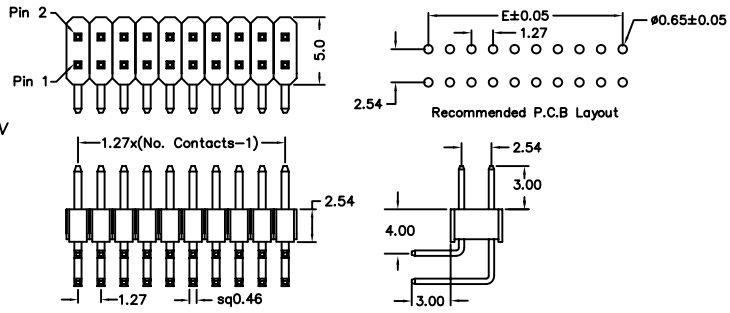
P-V36X-1XxxR

Specifications
Current Rating: 1Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 300V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Copper Alloy
Insulation Material: Polyester, UL 94V−0
Nylon 6T



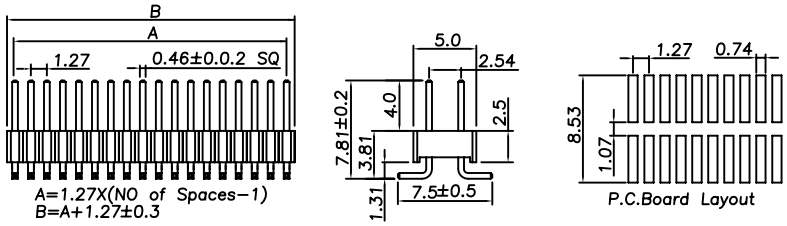
P-R253030-2Xxx

MATERIAL
Insulator : NYLON 6T
Contact Pin : Brass
SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩ Min. at DC 500V
Contact Resistance : 20mΩ Max. at DC 100mA
Operation Temperature : −55°C to + 105°C



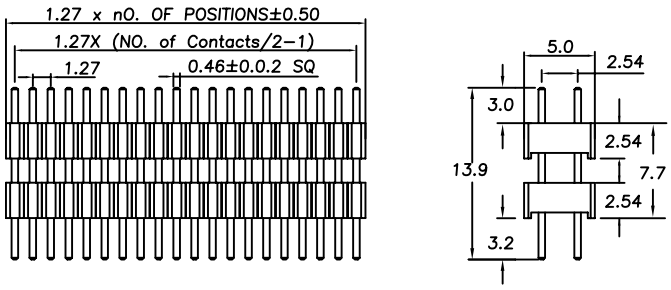
P-V38X-2Xxx

Conteract:
Contact:Brass.
Insuiator:Nylon 6T.
Finish:Gold flash plated over nickel.



PS-D0773032-2Xxx

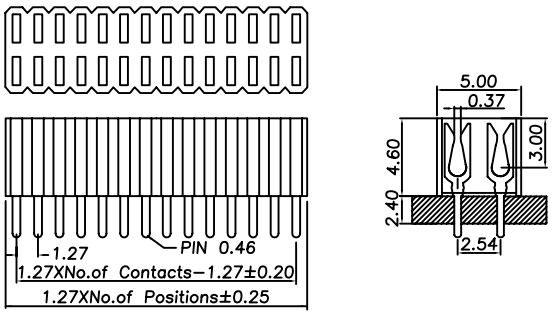
Conteract:
Contact:Brass.
Insuiator:Nylon 6T.
Finish:Gold flash plated over nickel.



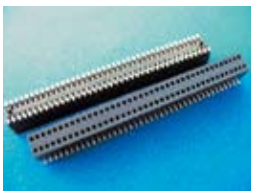
Y-D46-2Xxx

MATERIAL
Insulator:Polyester,UL 94V−0
Nylon 6T
Contact Pin: Brass

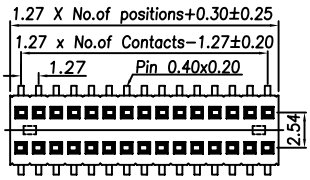
SPECIFICATION
Current Rate:1 AMP
Insulation Resistance:1000M OHM Min.at DC 300V
Contact Resistance:20m ohm Max. at DC 100mA
Operation Temperature:−40°C to + 105°C

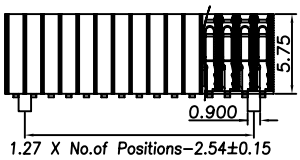


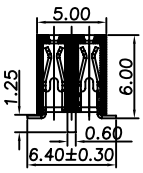
Y-V60P-2Xxx



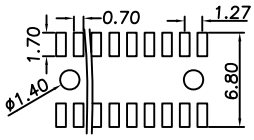
Specifications
Current Rating: 1Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 300V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
Nylon 6T





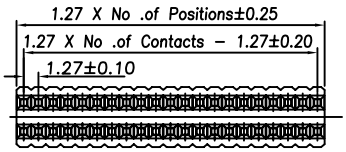


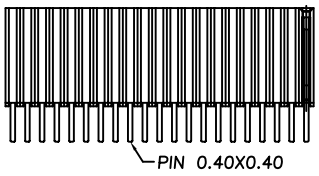
Recommended P.C.Board Hole Layout

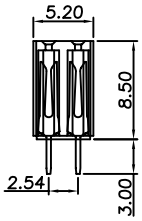


Y-D85-2Xxx

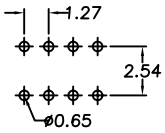
Specifications
Current Rating: 1Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 300V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
Nylon 6T







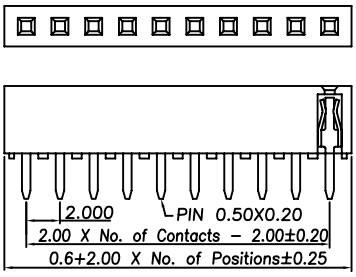
Recommended P.C.Board Hole Layout

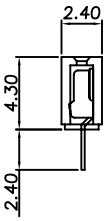


2.00mm Board to Board Connectors

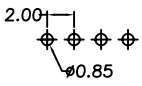
S-D43-1Xxx

Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester ,UL 94V−0
Nylon−6T



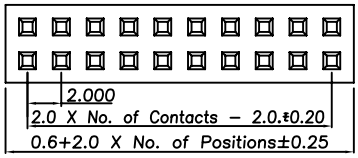


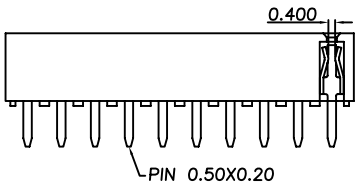
Recommended P.C.Board Hole Layout

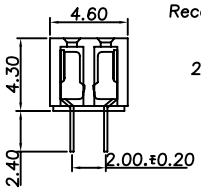


S-D43-2Xxx

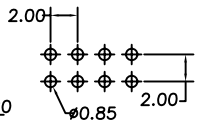
Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester ,UL 94V−0
Nylon−6T



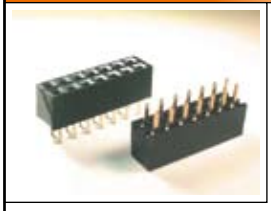




Recommended P.C.Board Hole Layout

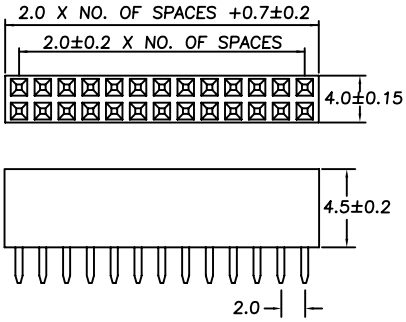


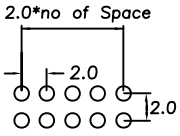
S-D45-2Xxx



Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

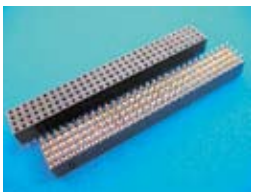
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester ,UL 94V−0

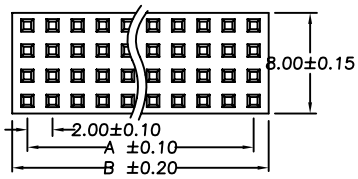




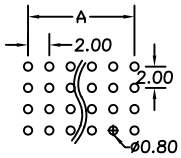
Pc Board Layout

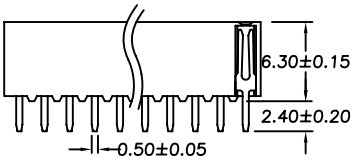
S-D63-4Xxx

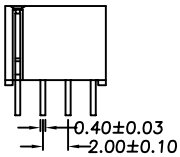




Recommended P.C.Board Hole Layout







SPECIFICATIONS
Current Rating: 1 Amp
Insulator resistance:5000 Megohms min.
Contact resistance: 20 m ohm Max.
Dielectric withstanding: AC 500 V
Operating Temperature:−40° − +105°C
Max Processing Temp:230° for 30~60 seconds (260° for 10 seconds)
Contact Material: Phosphor Bronze.
Insulator Material: Polyester,UL 94V−0
⊙Standard:Nylon−6T

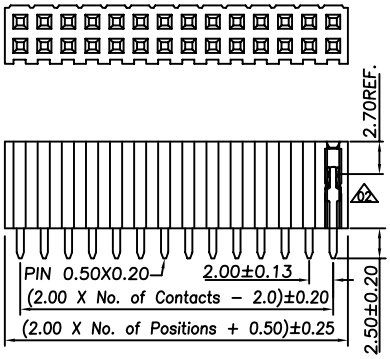
No. of Contacts	DIMENSIONS A	DIMENSIONS B
24	10.00	12.40
28	12.00	14.40
32	14.00	16.40
36	16.00	18.40
40	18.00	20.40
44	20.00	22.40
48	22.00	24.40
52	24.00	26.40
56	26.00	28.40
60	28.00	30.40
64	30.00	32.40
68	32.00	34.40
72	34.00	36.40

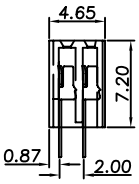
No. of Contacts	DIMENSIONS A	DIMENSIONS B
76	36.00	38.40
80	38.00	40.40
84	40.00	42.40
88	42.00	44.40
92	44.00	46.40
96	46.00	48.40
100	48.00	5040
104	50.00	52.40
108	52.00	54.40
112	54.00	56.40
116	56.00	58.40
120	58.00	60.40

S-D72-2Xxx

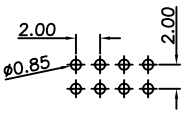
Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester ,UL 94V−0
Nylon 6T(Processing temp,260°C,10sec)
All materials must be GP materials

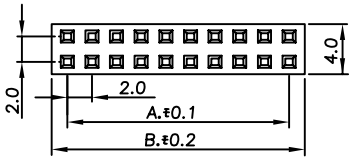


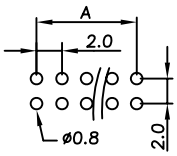


Recommended P.C.Board

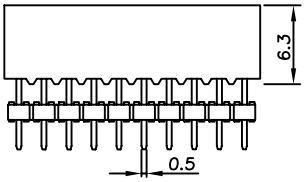


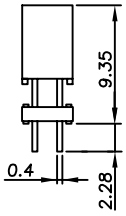
SE-D09323-2Xxx





Recommended PCB Layout





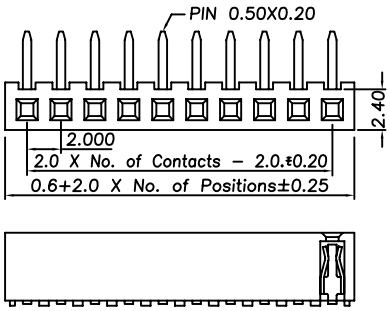
SPECIFICATIONS
Current Rating: 1 Amp
Insulator resistance: 5000 Megohms min.
Contact resistance: 20 m ohms max.
Dielectric withstanding: AC 500 V
Operating Temperature: −40°~+105°C
Max Processing Temp: 230° for 30 seconds
Contact Material: Copper Alloy
Insulator Material: High Temperature plastic,UL 94V−0

No. of Contacts	DIMENSIONS A	DIMENSIONS B
12	10.00	12.40
14	12.00	14.40
16	14.00	16.40
18	16.00	18.40
20	18.00	20.40
22	20.00	22.40
24	22.00	24.40
26	24.00	26.40
28	26.00	28.40
30	28.00	30.40
32	30.00	32.40
34	32.00	34.40
36	34.00	36.40

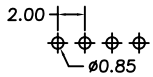
No. of Contacts	DIMENSIONS A	DIMENSIONS B
38	36.00	38.40
40	38.00	40.40
42	40.00	42.40
44	42.00	44.40
46	44.00	46.40
48	46.00	48.40
50	48.00	50.40
52	50.00	52.40
54	52.00	54.40
56	54.00	56.40
58	56.00	58.40
60	58.00	60.40

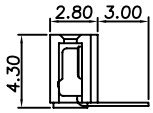
S-R43-1Xxx

Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester,UL 94V−0
Nylon−6T



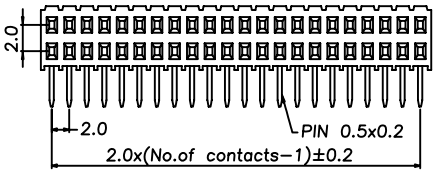
Recommended P.C.Board
Hole Layout

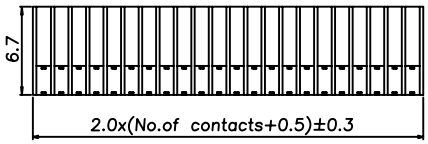


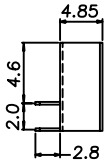


S-R67-2Xxx

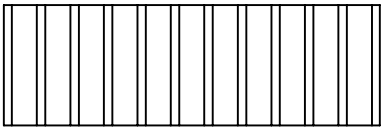
Specifications
Current Rating: 1Amp
Insulation Resistance: 5000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Max Processing Temp:230° For 30 Seconds
Material:
Contacts: Phosphor Bronze
Insulator material:Polyester UL 94V−0
Standard:Nylon−6T



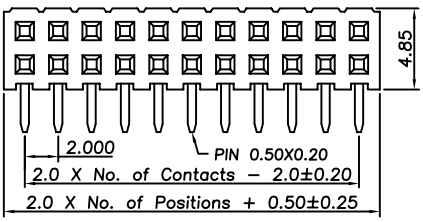


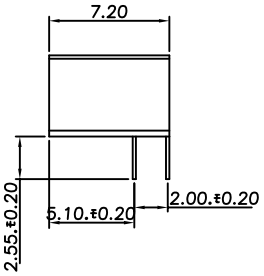


S-R72-2Xxx

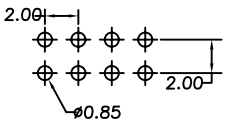


Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester,UL 94V−0
Nylon−6T

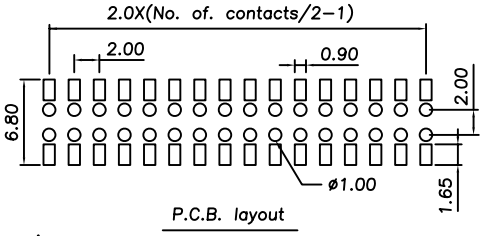




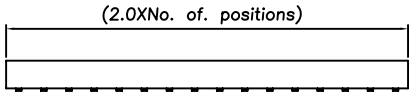
Recommended P.C.Board
Hole Layout

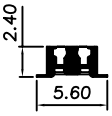


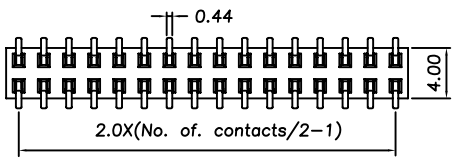
S-Z24X-2Xxx



P.C.B. layout



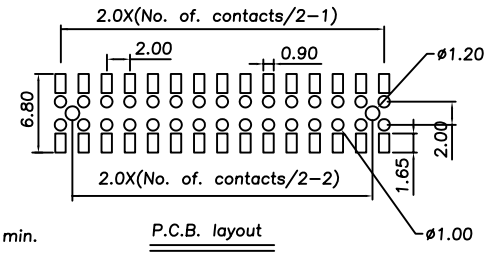


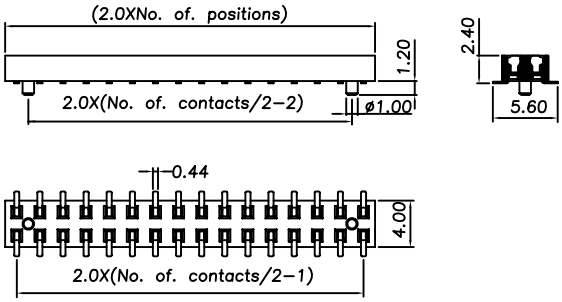


SPECIFICATIONS

* Current Rating : 1 Amps
* Insulator resistance: 5000 Megohms min.
* Dielectric withstanding: AC 500 V
* Operating Temperature: −40°−+105°C
* Max Processing Temp: 230° for 30 seconds (260° for 7 seconds)
* Contact Material: Phosphor bronze
* Housing: L.C.P. (UL 94 V−0)

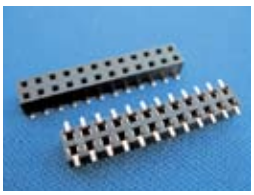
S-Z24P-2Xxx



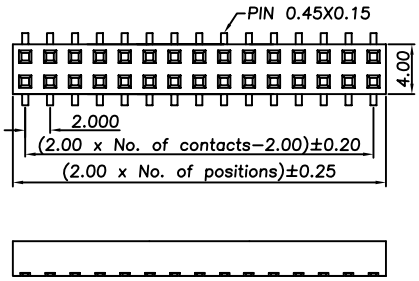


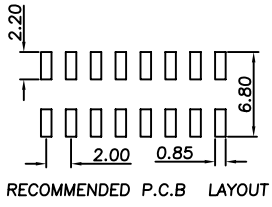
SPECIFICATIONS
* Current Rating : 1 Amps
* Insulator resistance: 5000 Megohms min.
* Dielectric withstanding: AC 500 V
* Operating Temperature: −40°−+105°C
* Max Processing Temp: 230° for 30 seconds (260° for 7 seconds)
* Contact Material: Phosphor bronze
* Housing: L.C.P. (UL 94 V−0)

S-V28X-2Xxx

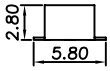


Specifications
Current Rating: 2Amp
Insulation Resistance: W1000M Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: W20m Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulator Material: Polyester,(UL94V−0)
Nylon 6T



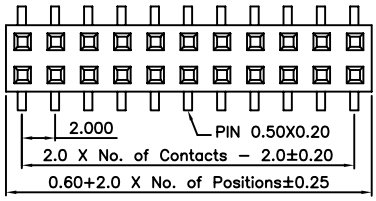


RECOMMENDED P.C.B LAYOUT

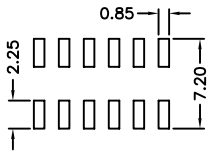


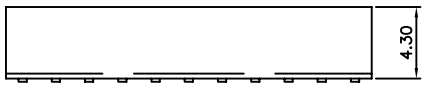
S-V45X-2Xxx

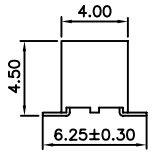
Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester ,UL 94V−0
NYLON−6T



RECOMMENDED P.C.B LAYOUT

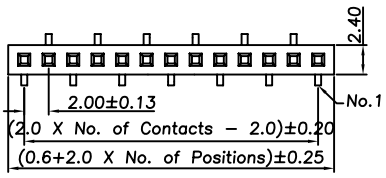


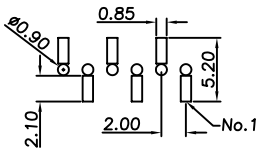




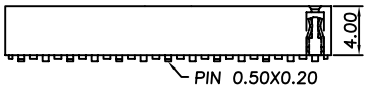
S-V45X-1XxxR

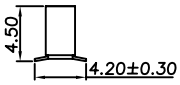
Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester ,UL 94V−0
Nylon 6T





RECOMMENDED P.C.B LAYOUT

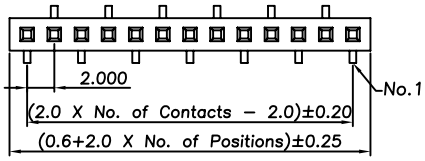




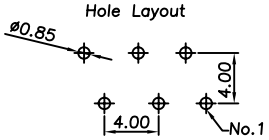
S-B40-1XxxR

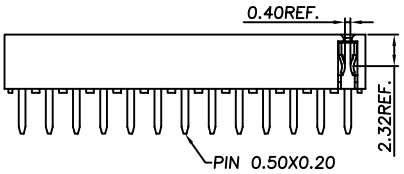
Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

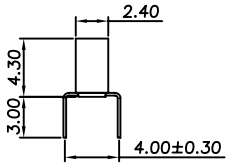
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester ,UL 94V−0
Nylon 6T



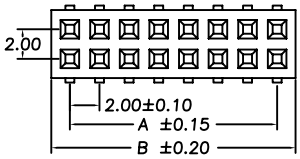
Recommended P.C.Board Hole Layout



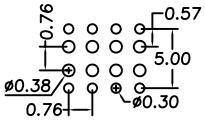




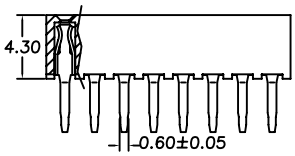
S-B50-2Xxx

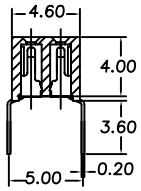


Recommended PCB Layout



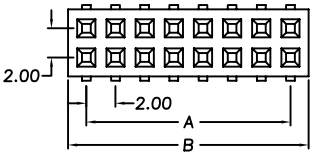
SPECIFICATIONS
Current Rating: 1 Amp
Insulator resistance:5000 Megohms min.
Contact resistance: 20 m ohms max.
Dielectric withstanding: AC 500 V
Operating Temperature: −40°~+105°C
Contact Material: Phosphor Bronze
Insulator Material: Polyester,UL 94V−0
•Standard: Nylon−6T



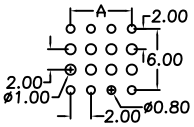


No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B
6	4.00	6.50	32	30.00	32.50	58	56.00	58.50
8	6.00	8.50	34	32.00	34.50	60	58.00	60.50
10	8.00	10.50	36	34.00	36.50	62	60.00	62.50
12	10.00	12.50	38	36.00	38.50	64	62.00	64.50
14	12.00	14.50	40	38.00	40.50	66	64.00	66.50
16	14.00	16.50	42	40.00	42.50	68	66.00	68.50
18	16.00	18.50	44	42.00	44.50	70	68.00	70.50
20	18.00	20.50	46	44.00	46.50	72	70.00	72.50
22	20.00	22.50	48	46.00	48.50	74	72.00	74.50
24	22.00	24.50	50	48.00	50.50	76	74.00	76.50
26	24.00	26.50	52	50.00	52.50	78	76.00	78.50
28	26.00	28.50	54	52.00	54.50	80	78.00	80.50
30	28.00	30.50	56	54.00	56.50			

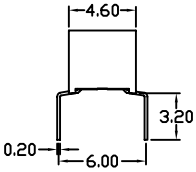
S-B60-2Xxx



Recommended PCB Layout



SPECIFICATIONS
Current Rating: 1 Amp
Insulator resistance:5000 Megohms min.
Contact resistance: 20 m ohms max.
Dielectric withstanding: AC 500 V
Operating Temperature: −40°~+105°C
Contact Material: Phosphor Bronze
Insulator Material: Polyester,UL 94V−0
•Standard: Nylon−6T

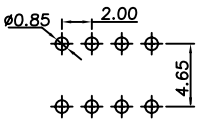


No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B
6	4.00	6.50	32	30.00	32.50	58	56.00	58.50
8	6.00	8.50	34	32.00	34.50	60	58.00	60.50
10	8.00	10.50	36	34.00	36.50	62	60.00	62.50
12	10.00	12.50	38	36.00	38.50	64	62.00	64.50
14	12.00	14.50	40	38.00	40.50	66	64.00	66.50
16	14.00	16.50	42	40.00	42.50	68	66.00	68.50
18	16.00	18.50	44	42.00	44.50	70	68.00	70.50
20	18.00	20.50	46	44.00	46.50	72	70.00	72.50
22	20.00	22.50	48	46.00	48.50	74	72.00	74.50
24	22.00	24.50	50	48.00	50.50	76	74.00	76.50
26	24.00	26.50	52	50.00	52.50	78	76.00	78.50
28	26.00	28.50	54	52.00	54.50	80	78.00	80.50
30	28.00	30.50	56	54.00	56.50			

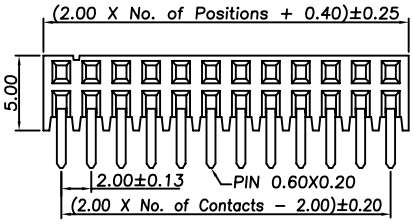
S-S-2Xxx

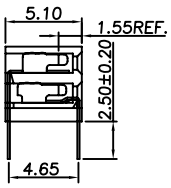
Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester ,UL 94V−0
Nylon 6T

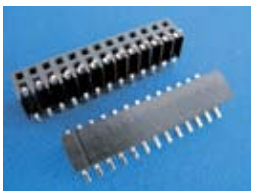


Recommended P.C.Board Hole Layout

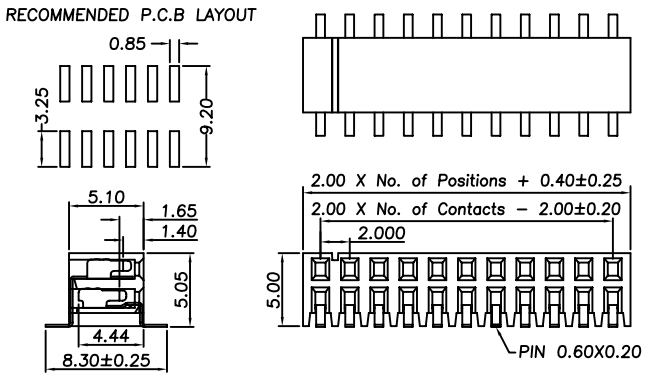




S-M-2Xxx



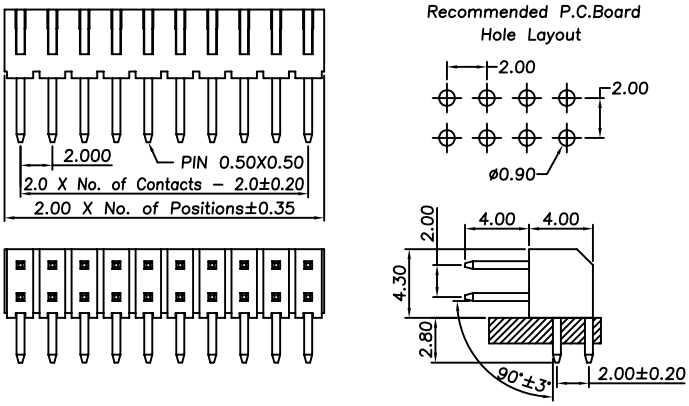
Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester ,UL 94V−0
NYLON−6T



M-RT4-2Xxx

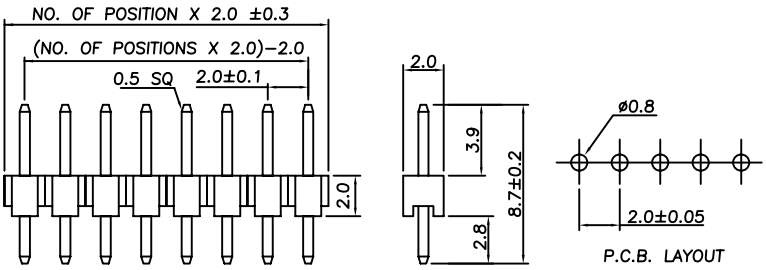
Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Copper Alloy
Insulation Material: Polyester,UL 94V−0
Nylon−6T



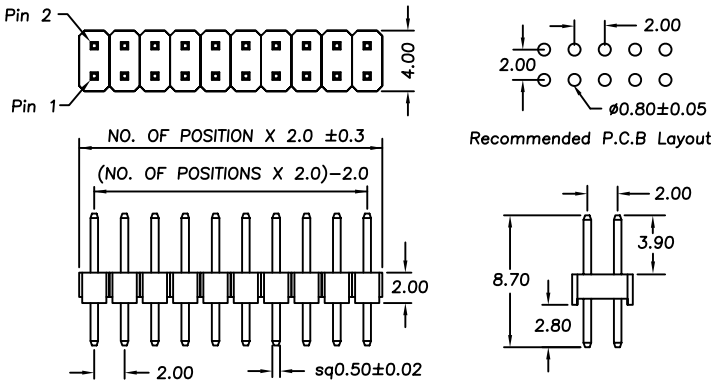
M-D-1Xxx

Specifications:
Current rating:1 Amps
Dielectric Withstanding:AC 500V
Operating Temperature:−25°C ~ +105°C
Contact resistance:20mohm max.
Insulation resistance:5,000Mohm min.
Materials:
Insulator:Polyester(UL94V−0)
Contact material:Brass
Plating:Gold flash

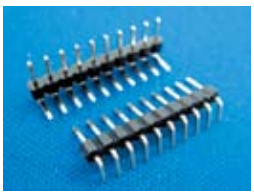


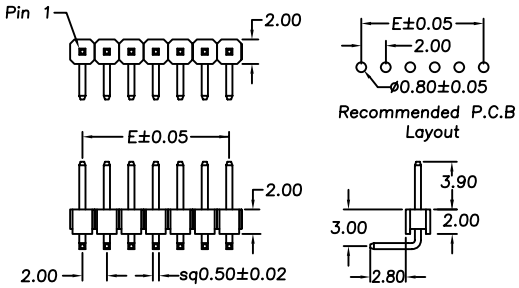
M-D-2Xxx

Specifications:
Current rating:1 Amps
Dielectric Withstanding:AC 500V
Operating Temperature:−25°C ~ +105°C
Contact resistance:20mohm max.
Insulation resistance:5,000Mohm min.
Materials:
Insulator:Polyester(UL94V−0)
Contact material:Brass
Plating:Gold flash



M-R-1Xxx



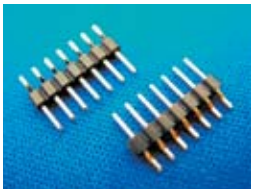


POLES	DIM E	POLES	DIM E	POLES	DIM E	POLES	DIM E
2	2.00	12	22.00	22	42.00	32	62.00
3	4.00	13	24.00	23	44.00	33	64.00
4	6.00	14	26.00	24	46.00	34	66.00
5	8.00	15	28.00	25	48.00	35	68.00
6	10.00	16	30.00	26	50.00	36	70.00
7	12.00	17	32.00	27	52.00	37	72.00
8	14.00	18	34.00	28	54.00	38	74.00
9	16.00	19	36.00	29	56.00	39	76.00
10	18.00	20	38.00	30	58.00	40	78.00
11	20.00	21	40.00	31	60.00		

MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

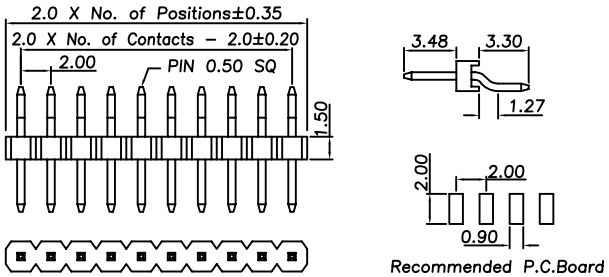
SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C

M-WX-1Xxx



Specifications
Current Rating: 2Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 500V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

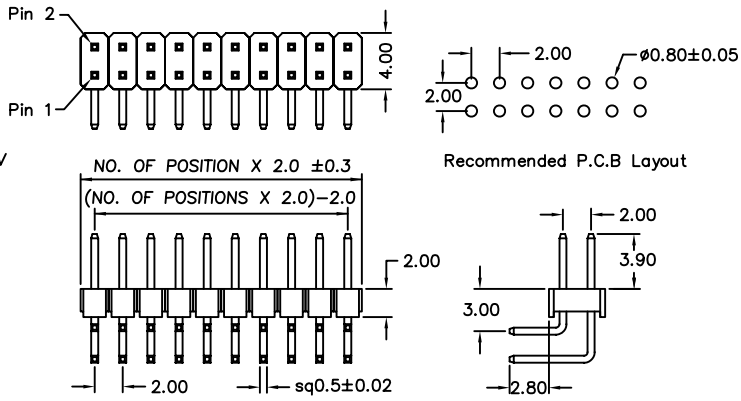
Materials
Contact Material: Copper Alloy
Insulation Material: Polyester UL 94V−0
Nylon−6T



M-R-2Xxx

MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

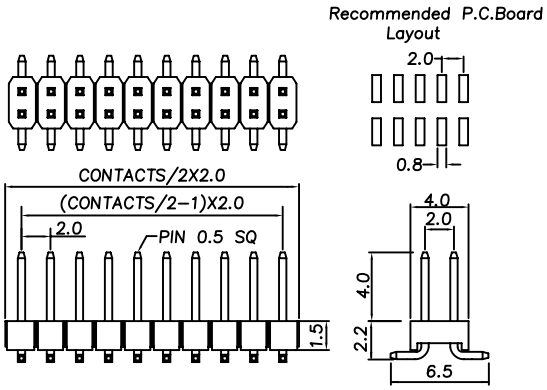
SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C



M-V22X-2Xxx

Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600VAC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

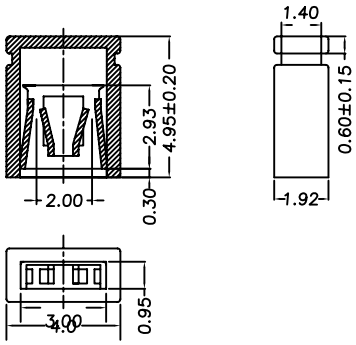
Materials
Contact Material: Copper alloy
Insulator Material:Polyester, UL94V−0
NYLON−6T



SJ-A-05

NOTES
1.MATERIAL
1.1 Insulator: P.B.T. +15% G.F. UL-94V-0
1.2 Contact: Phosphor Bronze
1.3 Plating: Gold Or Nickel Plated

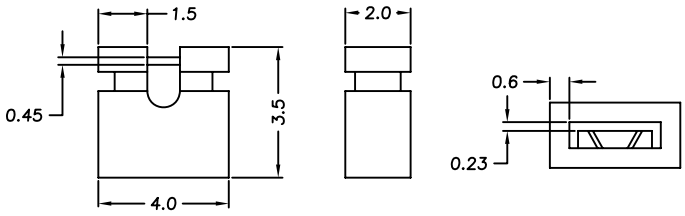
2.SPECIFICATION
2.1 Current Rating: 3Amp
2.2 Dielectric Withstanding: AC 1000V min.Per minute
2.3 Insulation Resistance: 1000M ohms At DC 500V
2.4 Contact Resistance: 25 M ohms Max
2.5 Contact Insertion Force: 1kg max
2.6 Contact Sepration force: 70g min
2.7 Operating Temperature: -55°C To +85°C



SJ-B-03

MATERIAL
Insulator : PBT+30% Glass fiber
Contact Pin : Phorphos bronze

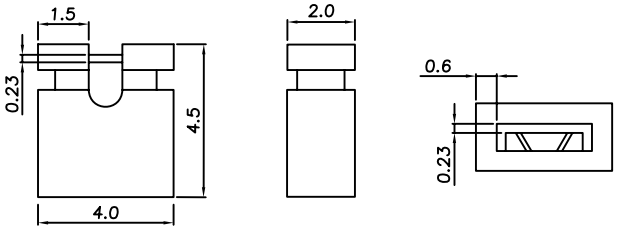
SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : 250V AC for one minute
Operation Temperature : -55°C to +105°C



SJ-B-04

MATERIAL
Insulator : PBT+30% Glass fiber
Contact Pin : Phorphos bronze

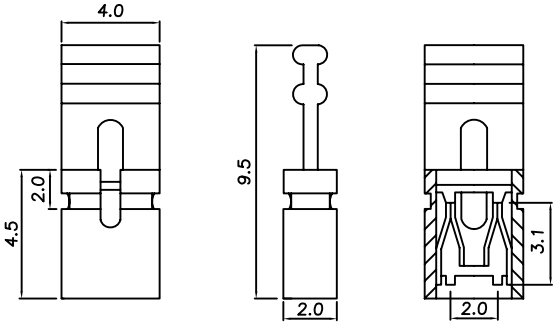
SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : 250V AC for one minute
Operation Temperature : -55°C to +105°C



SJ-H-04

MATERIAL
Insulator : PBT+30% Glass fiber
Contact Pin : Phorphos bronze

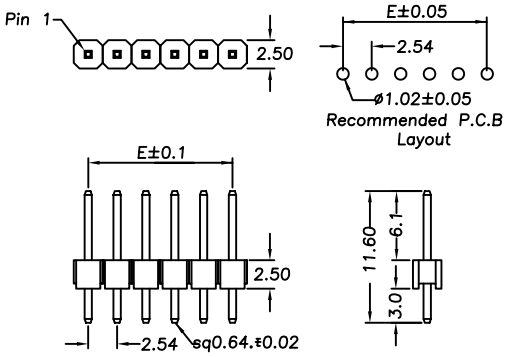
SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : 250V AC for one minute
Operation Temperature : -55°C to +105°C



2.54mm Board to Board Connectors

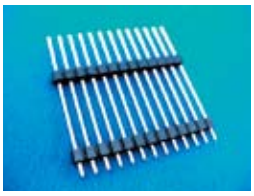
H-D-1Xxx

MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass , Gold Flash
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C

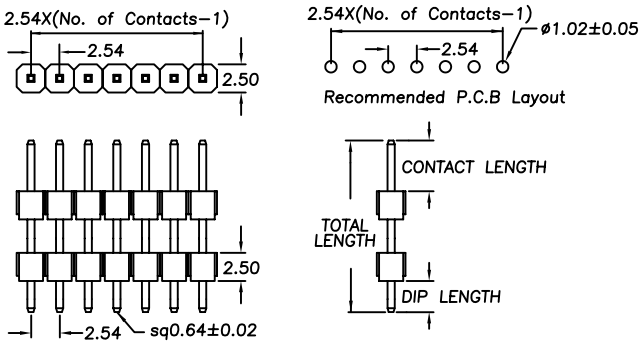


POLES	DIM E	POLES	DIM E	POLES	DIM E	POLES	DIM E
2	2.54	12	27.94	22	53.34	32	78.74
3	5.08	13	30.48	23	55.88	33	81.28
4	7.62	14	33.02	24	58.42	34	83.82
5	10.16	15	35.56	25	60.96	35	86.36
6	12.70	16	38.10	26	63.50	36	88.90
7	15.24	17	40.64	27	66.04	37	91.44
8	17.78	18	43.18	28	68.58	38	93.98
9	20.32	19	45.72	29	71.12	39	96.52
10	22.86	20	48.26	30	73.66	40	99.06
11	25.40	21	50.80	31	76.20		

HS-Dtttccdd-1Xxx

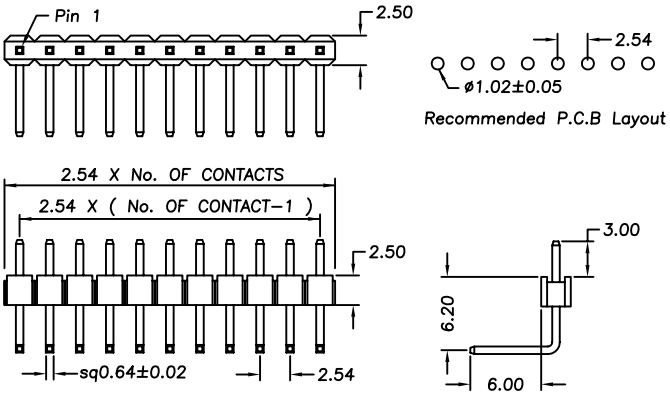


MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass , Gold Flash
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C



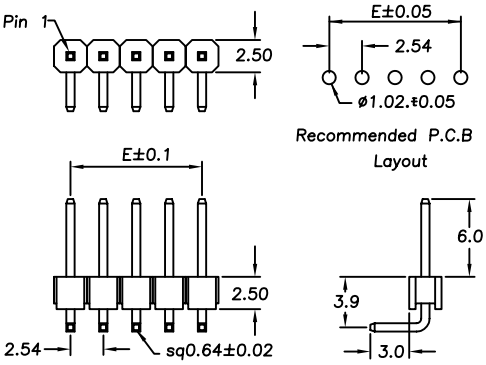
H-R-1Xxx

MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass , Gold Flash
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C



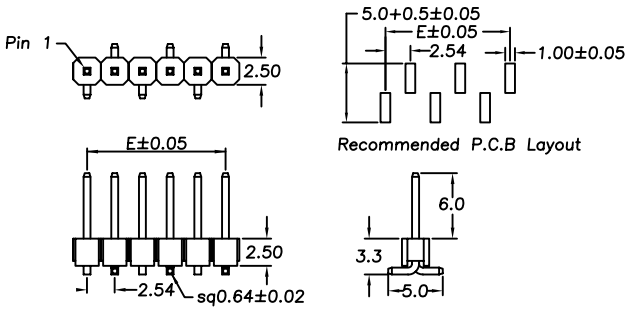
H-RL-1Xxx

MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass , Gold Flash
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C



POLES	DIM E	POLES	DIM E	POLES	DIM E	POLES	DIM E
2	2.54	12	27.94	22	53.34	32	78.74
3	5.08	13	30.48	23	55.88	33	81.28
4	7.62	14	33.02	24	58.42	34	83.82
5	10.16	15	35.56	25	60.96	35	86.36
6	12.70	16	38.10	26	63.50	36	88.90
7	15.24	17	40.64	27	66.04	37	91.44
8	17.78	18	43.18	28	68.58	38	93.98
9	20.32	19	45.72	29	71.12	39	96.52
10	22.86	20	48.26	30	73.66	40	99.06
11	25.40	21	50.80	31	76.20		

H-V33X-1XxxL

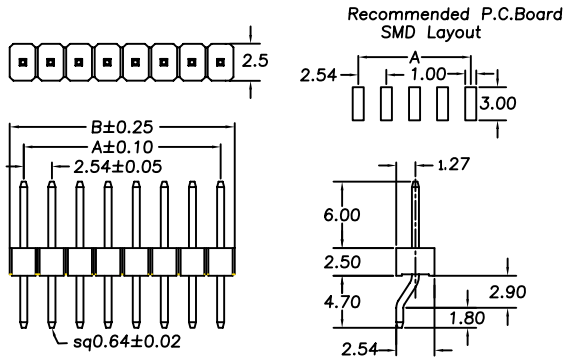


Materials
Contact Material: Copper alloy
Insulator Material:Polyester, UL94V-0
NYLON-6T

Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600VAC
Contact Resistance: 20mΩ Max.
Operating Temperature:-40°C to +105°C

POLES	DIM E	POLES	DIM E	POLES	DIM E	POLES	DIM E
2	2.54	12	27.94	22	53.34	32	78.74
3	5.08	13	30.48	23	55.88	33	81.28
4	7.62	14	33.02	24	58.42	34	83.82
5	10.16	15	35.56	25	60.96	35	86.36
6	12.70	16	38.10	26	63.50	36	88.90
7	15.24	17	40.64	27	66.04	37	91.44
8	17.78	18	43.18	28	68.58	38	93.98
9	20.32	19	45.72	29	71.12	39	96.52
10	22.86	20	48.26	30	73.66	40	99.06
11	25.40	21	50.80	31	76.20		

H-WX-1Xxx

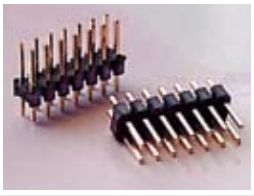


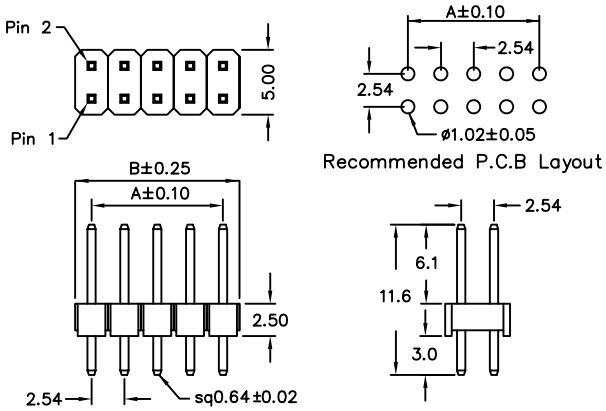
Materials
Contact Material: Copper alloy
Insulator Material:Polyester, UL94V-0
NYLON-6T

Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600VAC
Contact Resistance: 20mΩ Max.
Operating Temperature:-40°C to +105°C

No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B
3	5.08	7.62	22	53.34	55.86
4	7.62	10.16	23	55.88	58.42
5	10.16	12.70	24	58.42	60.96
6	12.70	15.24	25	60.96	63.50
7	15.24	17.78	26	63.50	66.04
8	17.78	20.32	27	66.04	68.58
9	20.32	22.86	28	68.58	71.12
10	22.86	25.40	29	71.12	73.66
11	25.40	27.94	30	73.66	76.20
12	27.94	30.48	31	76.20	78.74
13	30.48	33.02	32	78.74	81.28
14	33.02	35.56	33	81.28	83.82
15	35.56	38.10	34	83.82	86.36
16	38.10	40.64	35	86.36	88.90
17	40.64	43.18	36	88.90	91.44
18	43.18	45.72	37	91.44	93.98
19	45.72	48.26	38	93.98	96.52
20	48.26	50.80	39	96.52	99.06
21	50.80	53.34	40	99.06	101.60

H-D-2Xxx

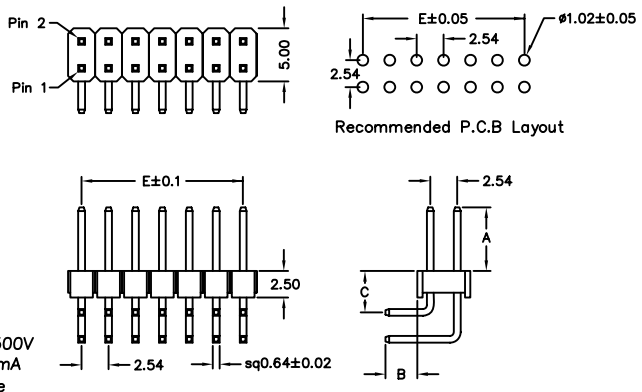




MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass , Gold Flash
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : -40°C to + 105°C

No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B
2	2.54	5.08	22	53.34	55.86
3	5.08	7.62	23	55.88	58.42
4	7.62	10.16	24	58.42	60.96
5	10.16	12.70	25	60.96	63.50
6	12.70	15.24	26	63.50	66.04
7	15.24	17.78	27	66.04	68.58
8	17.78	20.32	28	68.58	71.12
9	20.32	22.86	29	71.12	73.66
10	22.86	25.40	30	73.66	76.20
11	25.40	27.94	31	76.20	78.74
12	27.94	30.48	32	78.74	81.28
13	30.48	33.02	33	81.28	83.82
14	33.02	35.56	34	83.82	86.36
15	35.56	38.10	35	86.36	88.90
16	38.10	40.64	36	88.90	91.44
17	40.64	43.18	37	91.44	93.98
18	43.18	45.72	38	93.98	96.52
19	45.72	48.26	39	96.52	99.06
20	48.26	50.80	40	99.06	101.60
21	50.80	53.34			

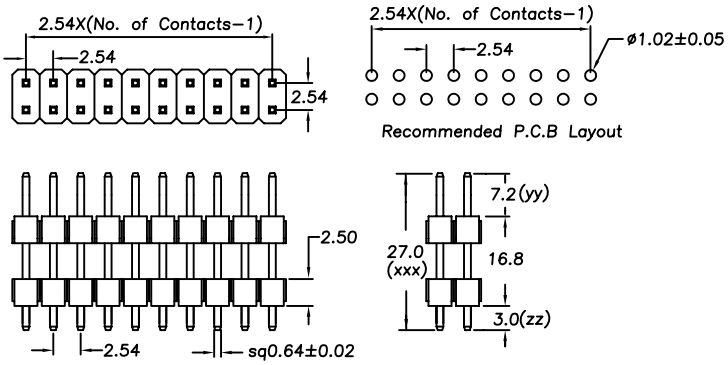
H-R-2Xxx



MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass , Gold Flash
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : -40°C to + 105°C

No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B
2	2.54	5.08	22	53.34	55.86
3	5.08	7.62	23	55.88	58.42
4	7.62	10.16	24	58.42	60.96
5	10.16	12.70	25	60.96	63.50
6	12.70	15.24	26	63.50	66.04
7	15.24	17.78	27	66.04	68.58
8	17.78	20.32	28	68.58	71.12
9	20.32	22.86	29	71.12	73.66
10	22.86	25.40	30	73.66	76.20
11	25.40	27.94	31	76.20	78.74
12	27.94	30.48	32	78.74	81.28
13	30.48	33.02	33	81.28	83.82
14	33.02	35.56	34	83.82	86.36
15	35.56	38.10	35	86.36	88.90
16	38.10	40.64	36	88.90	91.44
17	40.64	43.18	37	91.44	93.98
18	43.18	45.72	38	93.98	96.52
19	45.72	48.26	39	96.52	99.06
20	48.26	50.80	40	99.06	101.60
21	50.80	53.34			

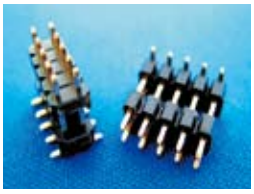
HSB-D2707230-2Xxx

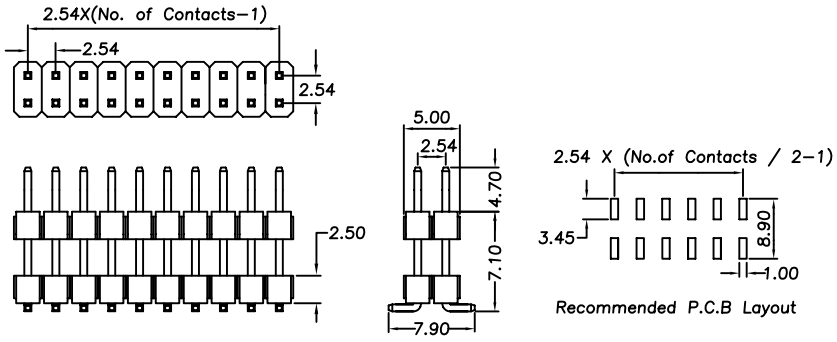


MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass, Gold Flash

SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩ Min. at DC 500V
Contact Resistance : 20mΩ Max. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C

HSB-V071X47-2Xxx

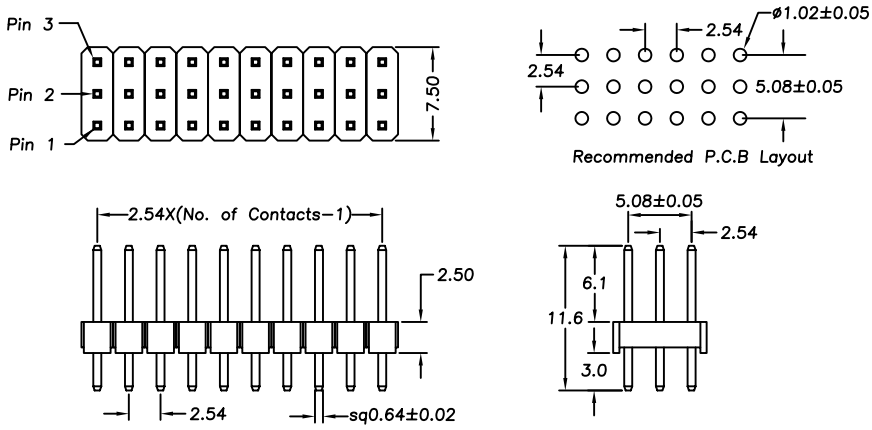




MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩ Min. at DC 500V
Contact Resistance : 20mΩ Max. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C

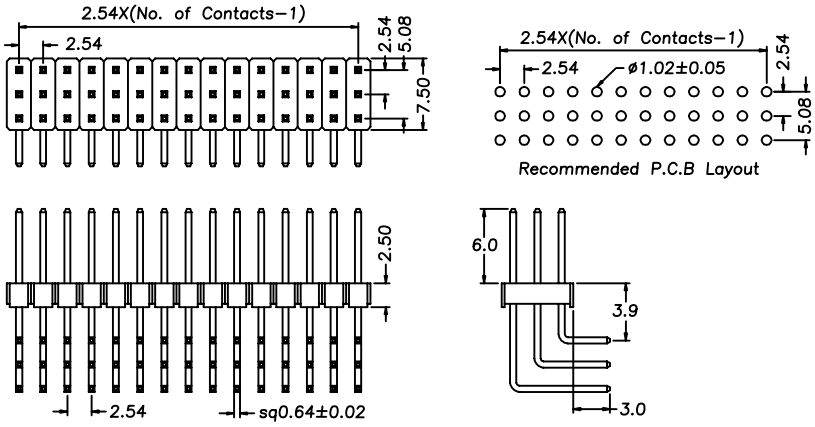
H-D-3Xxx



MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩ Min. at DC 500V
Contact Resistance : 20mΩ Max. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C

H-R-3Xxx



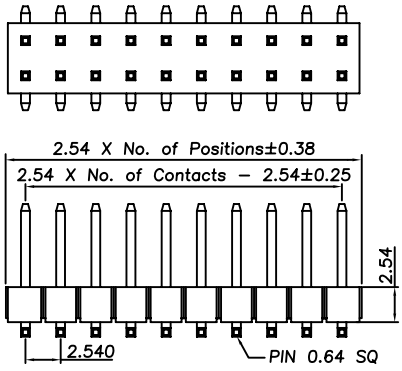
MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

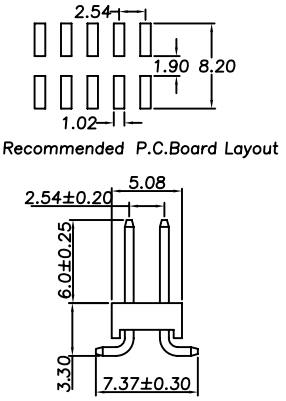
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩ Min. at DC 500V
Contact Resistance : 20mΩ Max. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C

H-V33X-2Xxx

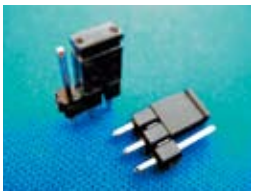
Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600VAC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Copper alloy
Insulator Material:Polyester, UL94V−0
NYLON−6T



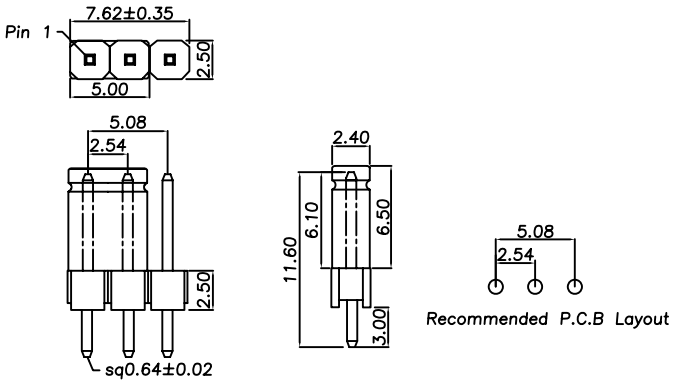


H-D-1X03JA



MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass, Gold Flash

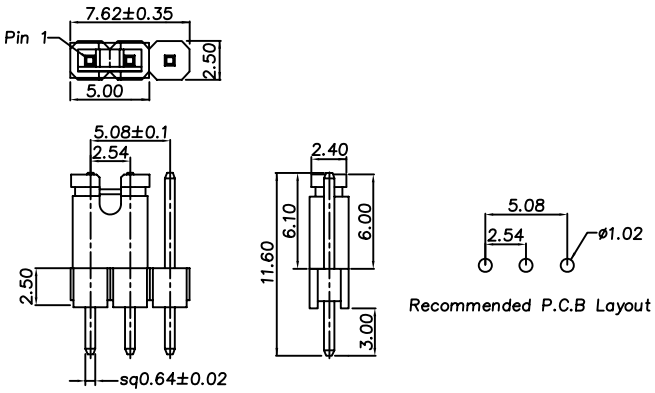
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C



H-D-1X03JB

MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

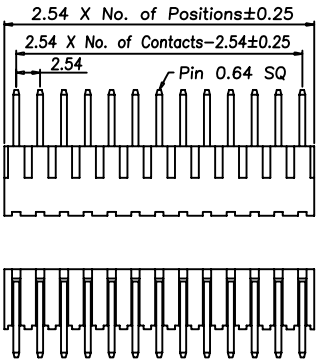
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C

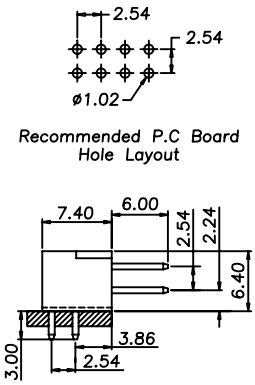


T-R74-xx

Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600VAC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

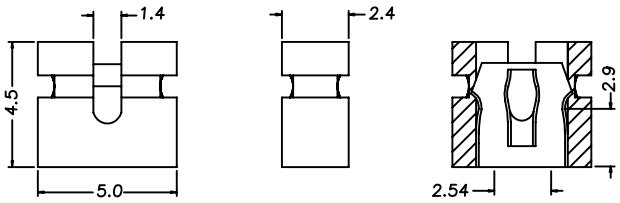
Materials
Contact Material: Copper alloy
Insulator Material:Polyester, UL94V−0
P.B.T





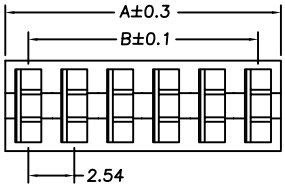
J-B-04

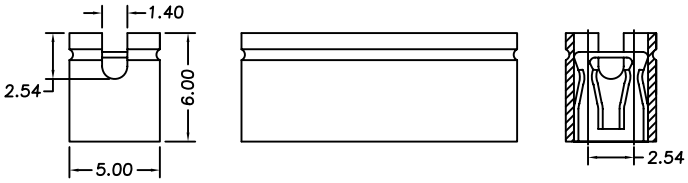
Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600VAC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Copper alloy
Insulator Material:Polyester, UL94V−0
P.B.T



J-BS-2Xxx

	A	B
2	5.08	2.54
3	7.62	5.08
4	10.16	7.62
5	12.70	10.16
6	15.24	12.70
7	17.78	15.24
8	20.32	17.78
9	22.86	20.32
10	25.40	22.86

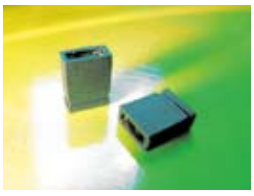


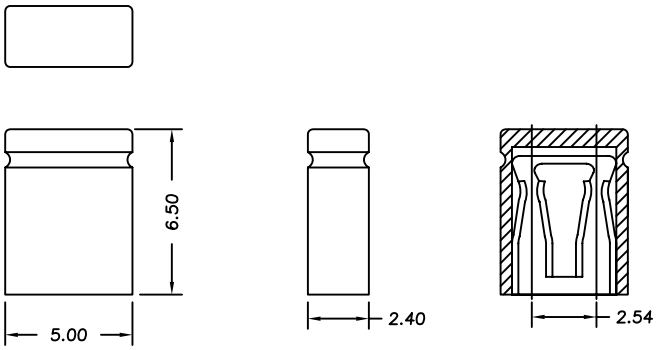


MATERIAL
Insulator : PBT+30% Glass fiber
Contact Pin : brass

SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 500mA
Dielectric Voltage : 500V AC for one minute
Operation Temperature : −55°C to +105°C

J-A-06

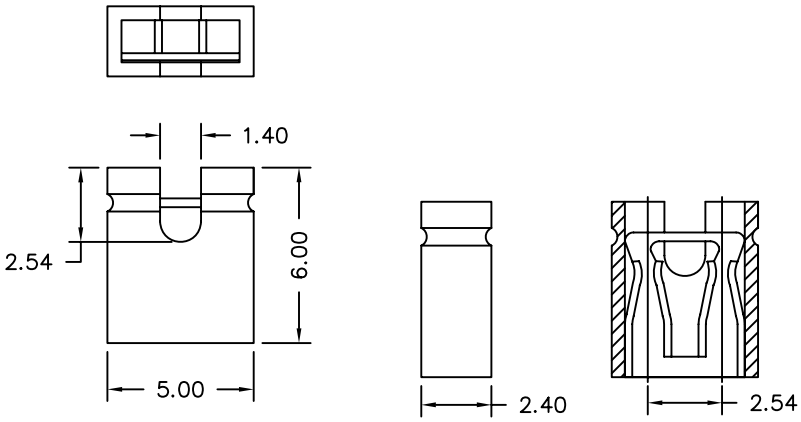




MATERIAL
Insulator : PBT+30% Glass fiber
Contact Pin : brass

SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 500mA
Dielectric Voltage : 500V AC for one minute
Operation Temperature : −55°C to +105°C

J-B-06

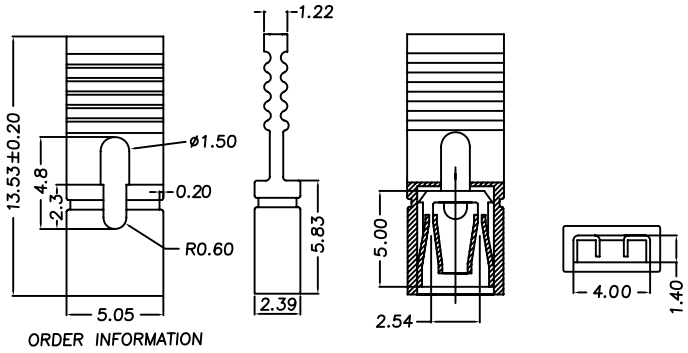


MATERIAL
Insulator : PBT+30% Glass fiber
Contact Pin : Brass

SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : 1000V AC for one minute
Operation Temperature : −55°C to +105°C

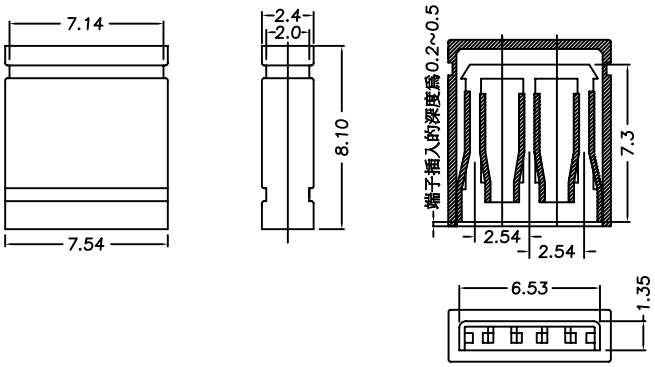
J-H-06

NOTES
Insulator : Nylon 66
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 1000MΩMin.
Contact Resistance : 20mΩMax. at DC 100mA
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −55°C to + 85°C



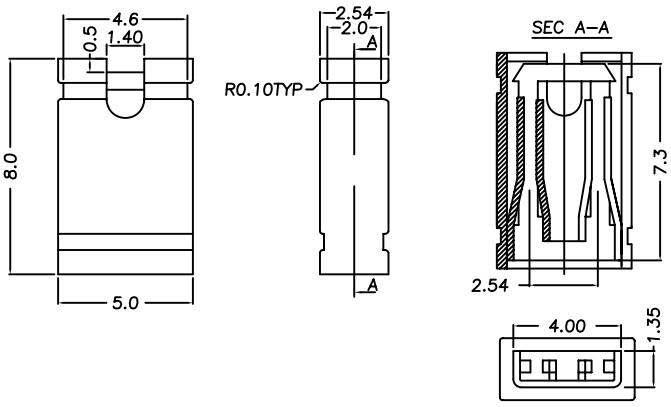
J-A-08

MATERIAL
Insulator : 25% Glass fiber PBT
Contact Pin : Phosphor Bronze
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 1000MΩMin.
Contact Resistance : 20mΩMax.
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −55°C to + 85°C



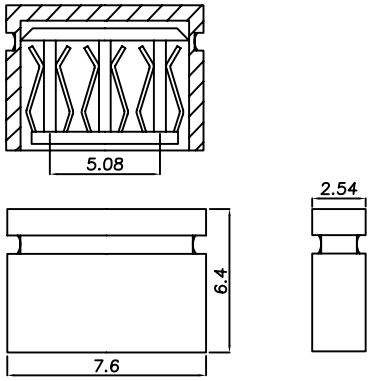
J-B-08

MATERIAL
Insulator : 25% Glass fiber PBT
Contact Pin : Phosphor Bronze
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 1000MΩMin.
Contact Resistance : 20mΩMax.
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −55°C to + 85°C



J51-A-06

MATERIAL
Insulator : PBT+30% Glass fiber
Contact Pin : brass
SPECIFICATION
Current Rate : 1 AMP
Insulation Resistance : 5000MΩMin. at DC 500V
Contact Resistance : 20mΩMax. at DC 500mA
Dielectric Voltage : 500V AC for one minute
Operation Temperature : −55°C to +105°C

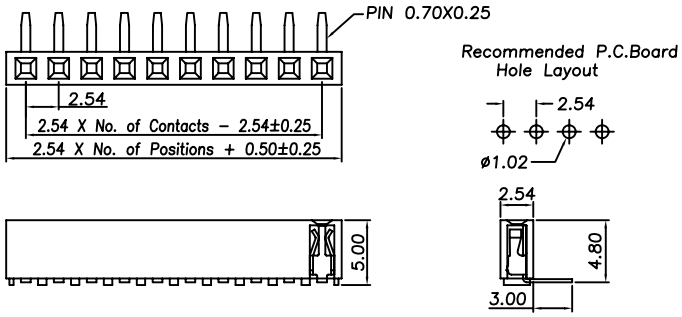


F-R50-1Xxx

Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0

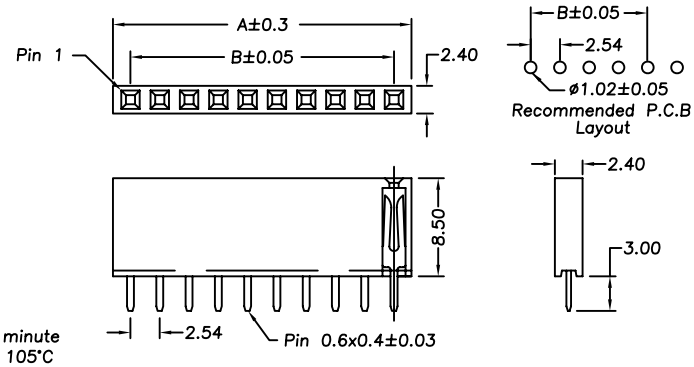
注:02-24PIN塑膠材質用P.B.T料生產，
25-40PIN塑膠材質用PA6T+20%料生產。



F-D-1Xxx

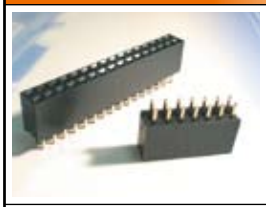
MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin.
Contact Resistance : 20mΩMax.
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C



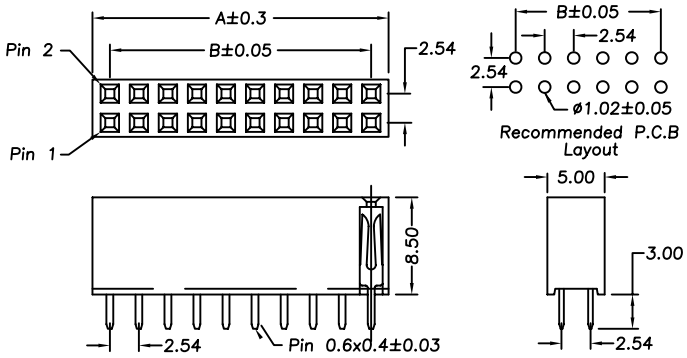
POLES	DIM A	DIM B	POLES	DIM A	DIM B
			21	53.84	50.80
2	5.58	2.54	22	56.38	53.34
3	8.12	5.08	23	58.92	55.88
4	10.66	7.62	24	61.46	58.42
5	13.20	10.16	25	64.00	60.96
6	15.74	12.70	26	66.54	63.50
7	18.28	15.24	27	69.08	66.04
8	20.82	17.78	28	71.62	68.58
9	23.36	20.32	29	74.16	71.12
10	25.90	22.86	30	76.70	73.66
11	28.44	25.40	31	79.24	76.20
12	30.98	27.94	32	81.78	78.74
13	33.52	30.48	33	84.32	81.28
14	36.06	33.02	34	86.86	83.82
15	38.60	35.56	35	89.40	86.36
16	41.14	38.10	36	91.94	88.90
17	43.68	40.64	37	94.48	91.44
18	46.22	43.18	38	97.02	93.98
19	48.76	45.72	39	99.56	96.52
20	51.30	48.26	40	102.1	99.06

F-D-2Xxx



MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin.
Contact Resistance : 20mΩMax.
Dielectric Voltage . AC 500V for one minute
Operation Temperature : −40°C to + 105°C

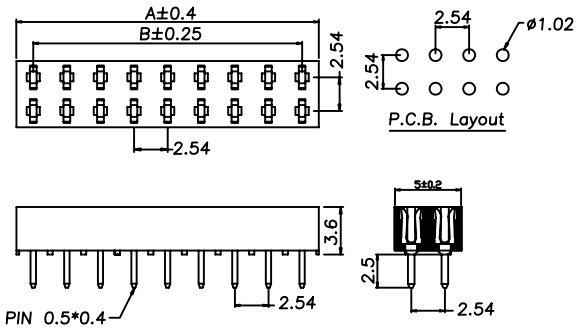


POLES	DIM A	DIM B	POLES	DIM A	DIM B
			21	53.84	50.80
2	5.58	2.54	22	56.38	53.34
3	8.12	5.08	23	58.92	55.88
4	10.66	7.62	24	61.46	58.42
5	13.20	10.16	25	64.00	60.96
6	15.74	12.70	26	66.54	63.50
7	18.28	15.24	27	69.08	66.04
8	20.82	17.78	28	71.62	68.58
9	23.36	20.32	29	74.16	71.12
10	25.90	22.86	30	76.70	73.66
11	28.44	25.40	31	79.24	76.20
12	30.98	27.94	32	81.78	78.74
13	33.52	30.48	33	84.32	81.28
14	36.06	33.02	34	86.86	83.82
15	38.60	35.56	35	89.40	86.36
16	41.14	38.10	36	91.94	88.90
17	43.68	40.64	37	94.48	91.44
18	46.22	43.18	38	97.02	93.98
19	48.76	45.72	39	99.56	96.52
20	51.30	48.26	40	102.1	99.06

F-D36-2Xxx

Specifications
Current Rating: 3Amp
Insulation Resistance: 5000M ΩMin.
Dielectric Withstanding: 500VAC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

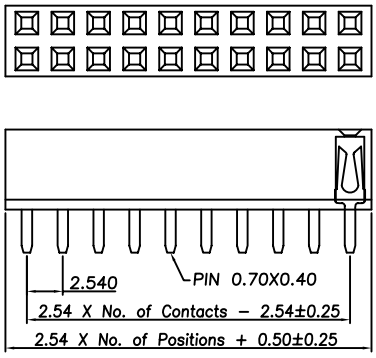
Materials
Contact Material: Full Gold,Full Tin,Selective Plated
Insulator Material:Polyester, UL94V−0
PA66

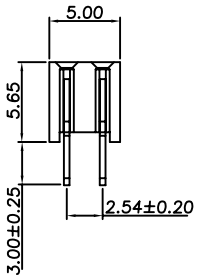


POLES	DIM A	DIM B	POLES	DIM A	DIM B
			2X21	53.54	50.80
2X02	5.28	2.54	2X22	56.08	53.34
2X03	7.82	5.08	2X23	58.62	55.88
2X04	10.36	7.62	2X24	61.16	58.42
2X05	12.90	10.16	2X25	63.70	60.96
2X06	15.44	12.70	2X26	66.24	63.50
2X07	17.98	15.24	2X27	68.78	66.04
2X08	20.52	17.78	2X28	71.32	68.58
2X09	23.06	20.32	2X29	73.86	71.12
2X10	25.60	22.86	2X30	76.40	73.66
2X11	28.14	25.40	2X31	78.94	76.20
2X12	30.68	27.94	2X32	81.48	78.74
2X13	33.22	30.48	2X33	84.02	81.28
2X14	35.76	33.02	2X34	86.56	83.82
2X15	38.30	35.56	2X35	89.10	86.36
2X16	40.84	38.10	2X36	91.64	88.90
2X17	43.38	40.64	2X37	94.18	91.44
2X18	45.92	43.18	2X38	96.72	93.98
2X19	48.46	45.72	2X39	99.26	96.52
2X20	51.00	48.26	2X40	101.8	99.06

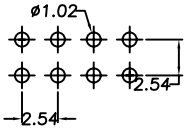
F-D57-2Xxx

Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0 P.B.T



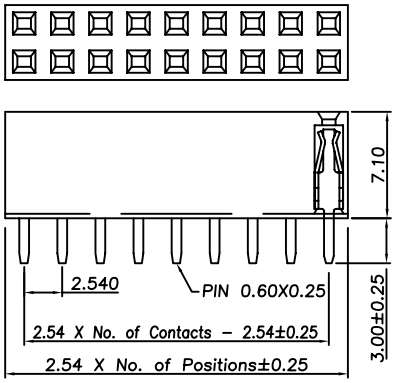


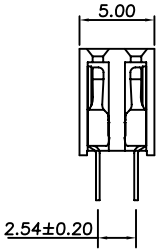
Recommended P.C.Board Hole Layout



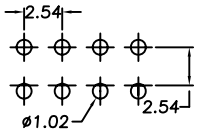
F-D71-2Xxx

Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0 P.B.T

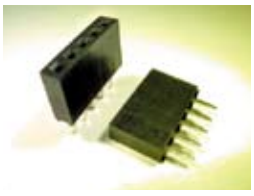




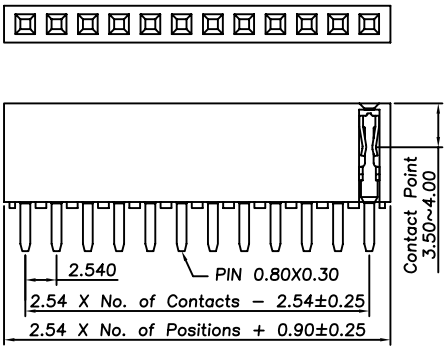
Recommended P.C.Board Hole Layout

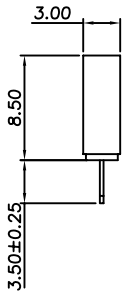


F-D85-1Xxx

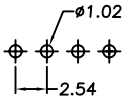


Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0 P.B.T

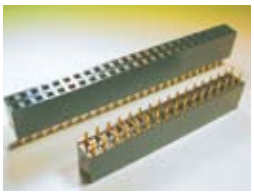




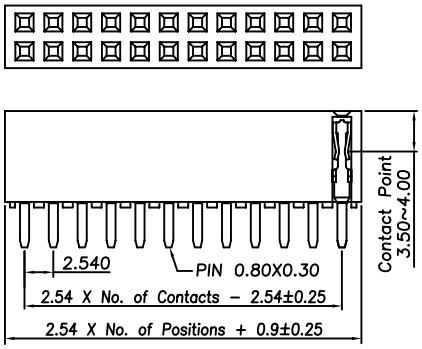
Recommended P.C.Board Hole Layout

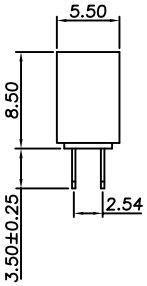


F-D85-2Xxx

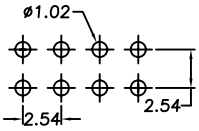


Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0 P.B.T

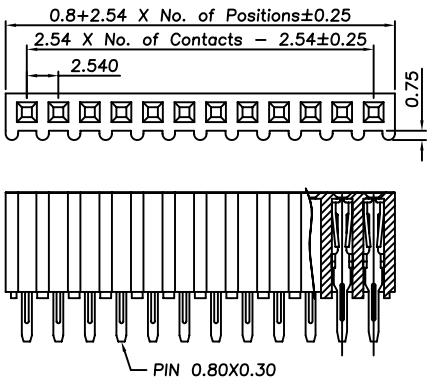


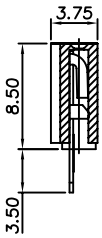


Recommended P.C.Board Hole Layout

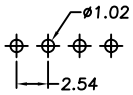


F-D85W-1Xxx





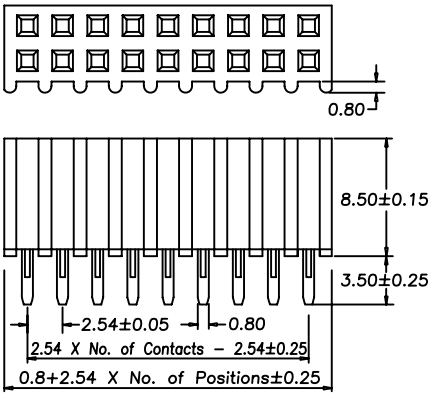
Recommended P.C.Board Hole Layout

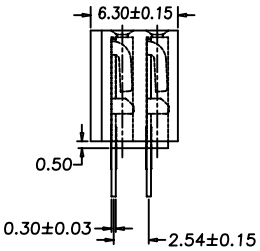


Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:–40°C to +105°C

Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V–0 P.B.T

F-D85W-2Xxx

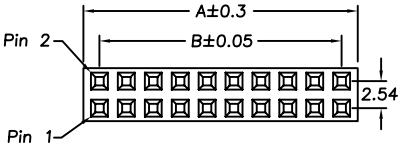


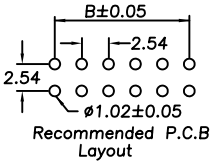


Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:–40°C to +105°C

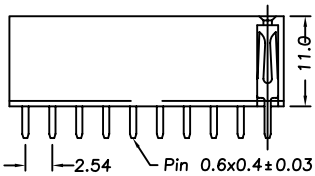
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V–0 P.B.T

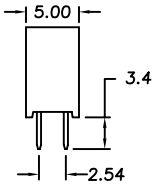
F-D110-2Xxx





Recommended P.C.B Layout



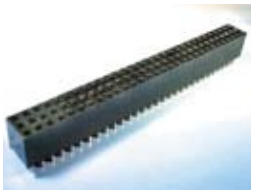


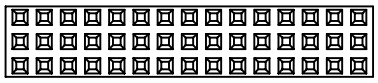
POLES	DIM A	DIM B	POLES	DIM A	DIM B
			2X21	53.84	50.80
2X2	5.58	2.54	2X22	56.38	53.34
2X3	8.12	5.08	2X23	58.92	55.88
2X4	10.66	7.62	2X24	61.46	58.42
2X5	13.20	10.16	2X25	64.00	60.96
2X6	15.74	12.70	2X26	66.54	63.50
2X7	18.28	15.24	2X27	69.08	66.04
2X8	20.82	17.78	2X28	71.62	68.58
2X9	23.36	20.32	2X29	74.16	71.12
2X10	25.90	22.86	2X30	76.70	73.66
2X11	28.44	25.40	2X31	79.24	76.20
2X12	30.98	27.94	2X32	81.78	78.74
2X13	33.52	30.48	2X33	84.32	81.28
2X14	36.06	33.02	2X34	86.86	83.82
2X15	38.60	35.56	2X35	89.40	86.36
2X16	41.14	38.10	2X36	91.94	88.90
2X17	43.68	40.64	2X37	94.48	91.44
2X18	46.22	43.18	2X38	97.02	93.98
2X19	48.76	45.72	2X39	99.56	96.52
2X20	51.30	48.26	2X40	102.1	99.06

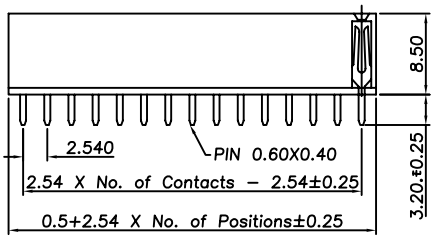
MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

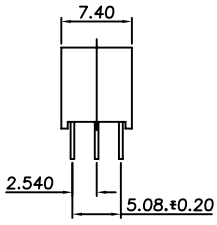
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩMin.
Contact Resistance : 20mΩMax.
Dielectric Voltage : AC 500V for one minute
Operation Temperature : –40°C to + 105°C

F-D-3Xxx

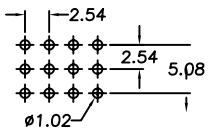








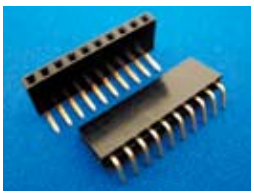
Recommended P.C.Board Hole Layout



Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:–40°C to +105°C

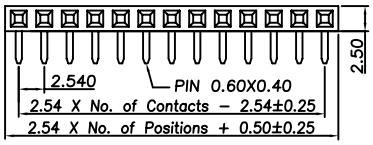
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V–0 P.B.T

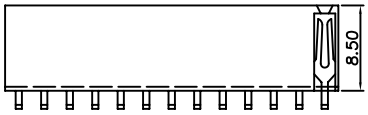
F-R-1Xxx



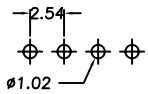
Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

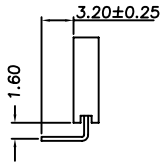
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
注:02-24PIN塑膠材質用P.B.T料生產，
25-40PIN塑膠材質用PA6T+20%料生產。





Recommended P.C.Board Hole Layout

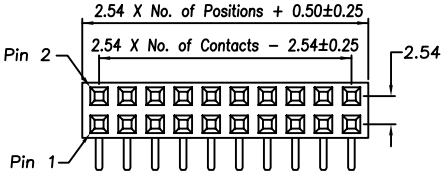


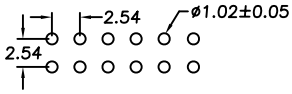


F-R-2Xxx

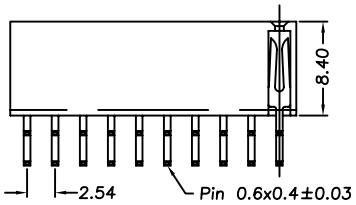
MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

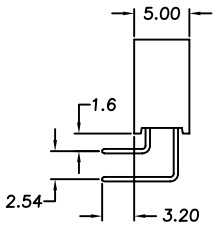
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩ Min.
Contact Resistance : 20mΩ Max.
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C





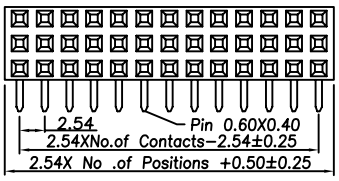
Recommended P.C.B Layout

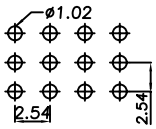




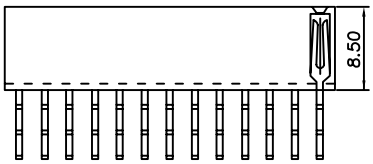
F-R-3Xxx

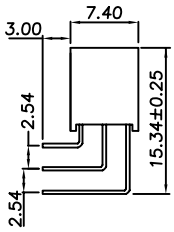
Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600VAC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Full Gold,Full Tin,Selective Plated
Insulator Material:Polyester, UL94V−0
Nylon 6T





Recommended P.C.B Layout

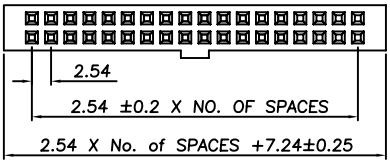




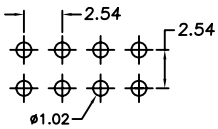
FK-DK-2Xxx

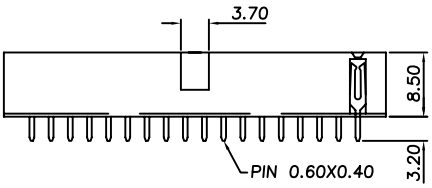
MATERIAL
Insulator : 30% Glass fiber PBT
Contact Pin : Brass

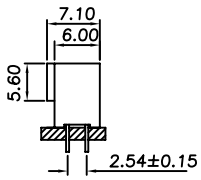
SPECIFICATION
Current Rate : 3 AMP
Insulation Resistance : 5000MΩ Min.
Contact Resistance : 20mΩ Max.
Dielectric Voltage : AC 500V for one minute
Operation Temperature : −40°C to + 105°C



Recommended P.C.Board Hole Layout



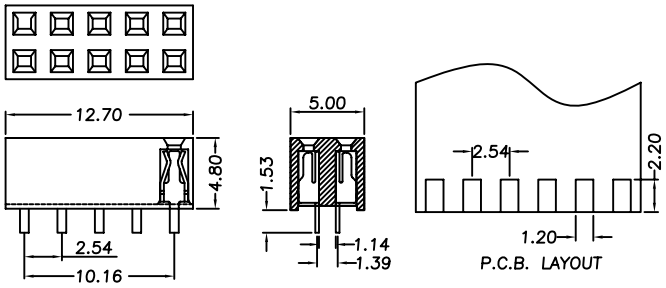




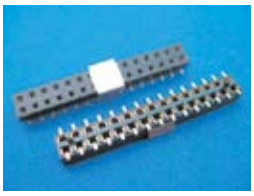
F-E10-2Xxx

SPECIFICATIONS
CURRENT RATING: 3 AMP
INSULATION RESISTANCE: 1000M OHMS MIN.
DIELECTRIC WITHSTANDING: 600V AC/DC
CONTACT RESISTANCE: 20m OHMS MAX.
OPERATING TEMPERATURE: −25°C ~ +85°C

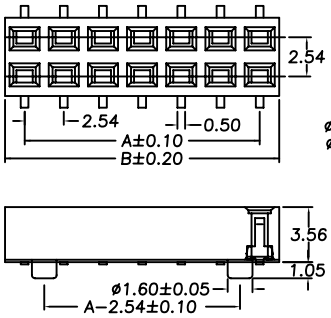
MATERIALS
CONTACT MATERIAL: PHOSPHOR BRONZE
INSULATION MATERIAL: POLYESTER, UL 94V−0
NYLON 6T

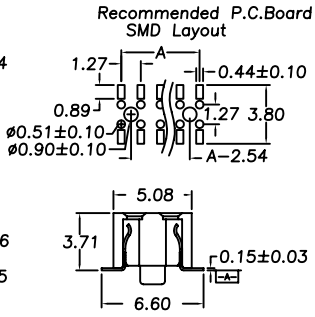


F-Z37PC-2Xxx



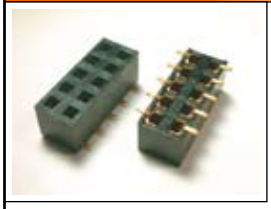
SPECIFICATIONS
Current Rating: 3 Amps
Insulator resistance: 5000 Megohms min.
Contact resistance: 20 m ohm Max.
Dielectric withstanding: AC 500 V
Operating Temperature: −40° − +105°C
Max Processing Temp: 230° for 30 seconds
Contact Material: Phosphor Bronze.
Insulator Material: Polyester,UL 94V−0
◎Standard: L.C.P





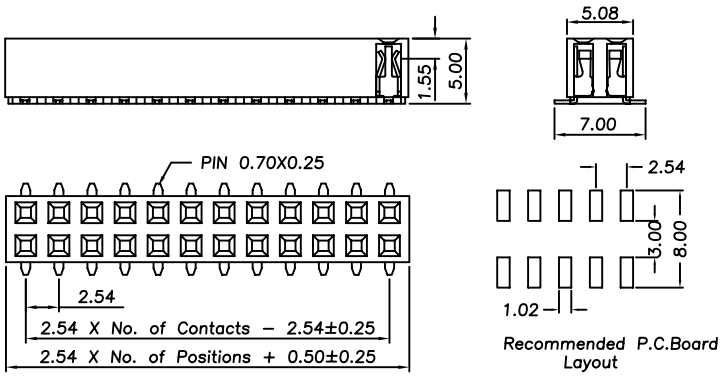
No. of Contacts	DIMENSIONS A	DIMENSIONS B	No. of Contacts	DIMENSIONS A	DIMENSIONS B
2X2	2.54	5.08	2X22	53.34	55.86
2X3	5.08	7.62	2X23	55.88	58.42
2X4	7.62	10.16	2X24	58.42	60.96
2X5	10.16	12.70	2X25	60.96	63.50
2X6	12.70	15.24	2X26	63.50	66.04
2X7	15.24	17.78	2X27	66.04	68.58
2X8	17.78	20.32	2X28	68.58	71.12
2X9	20.32	22.86	2X29	71.12	73.66
2X10	22.86	25.40	2X30	73.66	76.20
2X11	25.40	27.94	2X31	76.20	78.74
2X12	27.94	30.48	2X32	78.74	81.28
2X13	30.48	33.02	2X33	81.28	83.82
2X14	33.02	35.56	2X34	83.82	86.36
2X15	35.56	38.10	2X35	86.36	88.90
2X16	38.10	40.64	2X36	88.90	91.44
2X17	40.64	43.18	2X37	91.44	93.98
2X18	43.18	45.72	2X38	93.98	96.52
2X19	45.72	48.26	2X39	96.52	99.06
2X20	48.26	50.80	2X40	99.06	101.60
2X21	50.80	53.34			

F-V50X-2Xxx

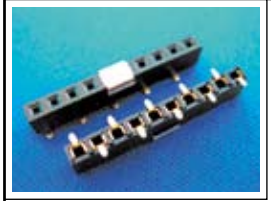


Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
Nylon 6T



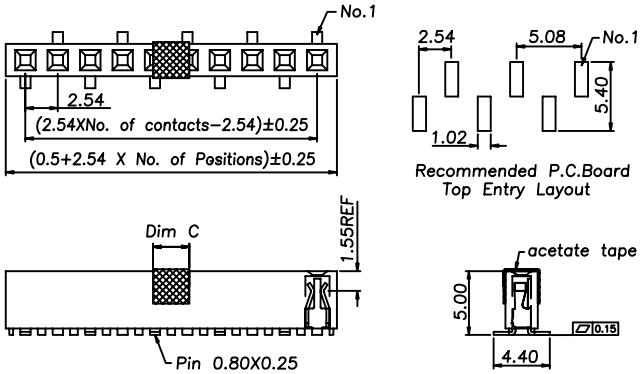
F-V50XC-1XxxL



Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
Nylon 6T

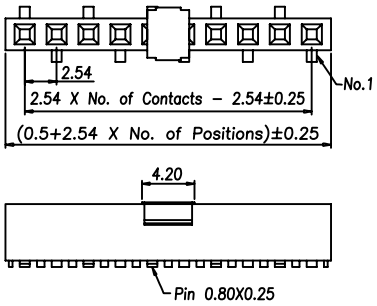
Notes	Dim C
03~25Pins	5.10mm
26~40Pins	10mm



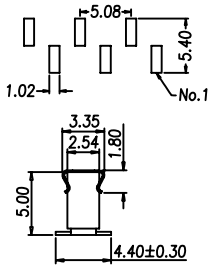
F-V50XC-1XxxR

Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
Nylon 6T



Recommended P.C.Board
Top Entry Layout

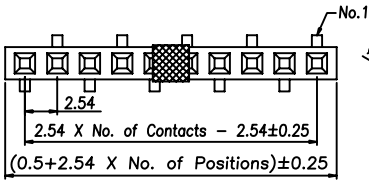


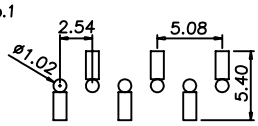
F-Z50XC-1XxxL

Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

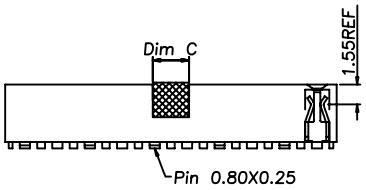
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
Nylon 6T

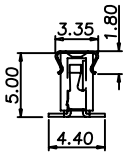
Notes	Dim C
03~25Pins	5.10mm
26~40Pins	10mm



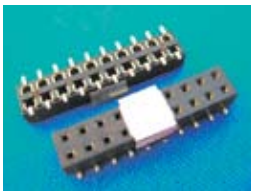


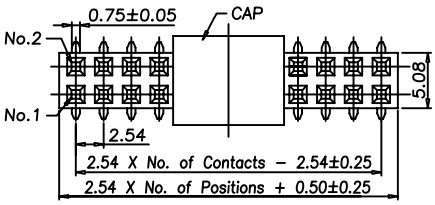
Recommended P.C.Board
Top Entry Layout

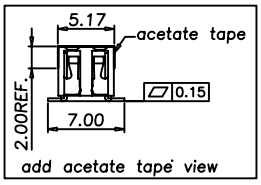


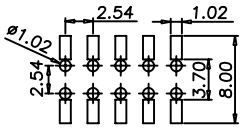


F-Z50XC-2Xxx





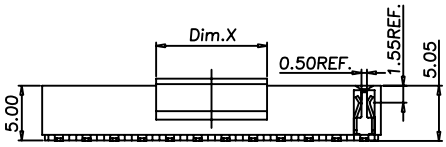


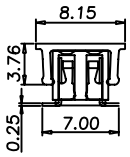


Recommended P.C.Board
Layout

Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

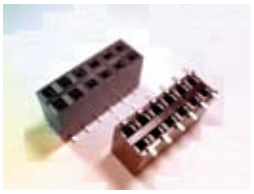
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0
Nylon 6T & Lcp





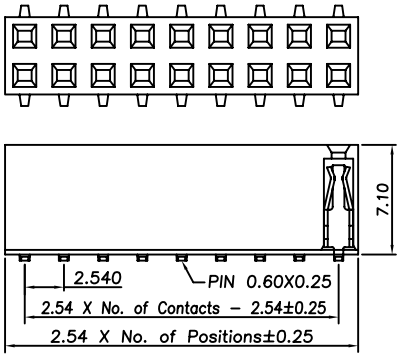
Name	Dim.X	Note
acetate tape	5.00mm	02~25pins
	10.00mm	26~40pins
CAP	4.00mm	02~08pins
	10.15mm	09~40pins

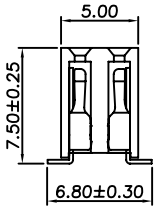
F-V75X-2Xxx



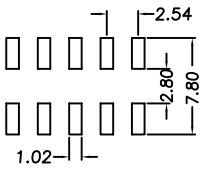
Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C

Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0 Nylon 6T

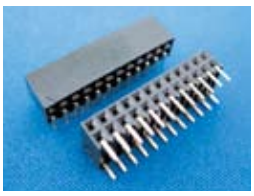




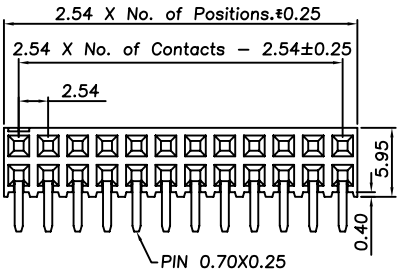
Recommended P.C.Board
Layout

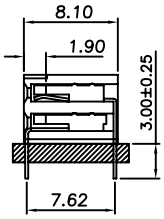


F-S-2Xxx

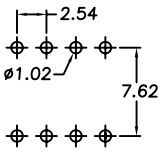


Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0 P.B.T

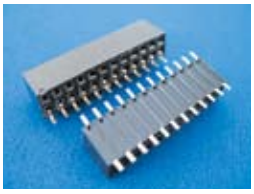




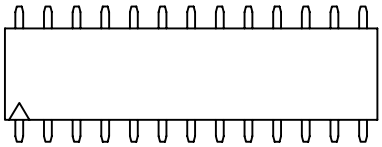
Recommended P.C.Board Hole Layout

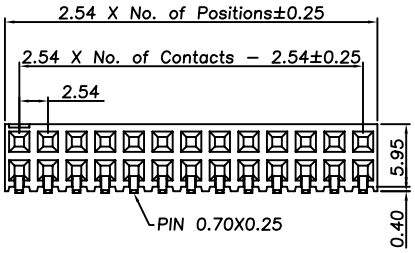


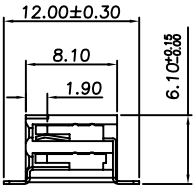
F-MX-2Xxx



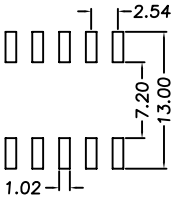
Specifications
Current Rating: 3Amp
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 600V AC/DC
Contact Resistance: 20mΩ Max.
Operating Temperature:−40°C to +105°C
Materials
Contact Material: Phosphor Bronze
Insulation Material: Polyester, UL 94V−0 Nylon 6T





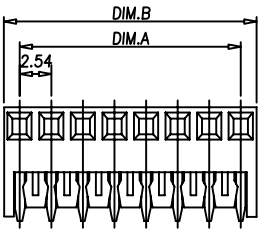


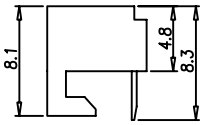
Recommended P.C.Board Layout

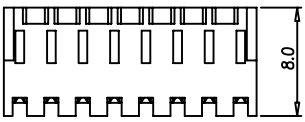


MX-S-xx

Specifications
Current Rating: 2.5A max.
Insulation Resistance: 500M ΩMin.
Dielectric Withstanding: 1500V AC
Contact Resistance: 20mΩ Max.
Operating Temperature:0°C to +75°C
Materials
Contact Material: Phosphor Bronze
Housing:Nylon UL 94V−0



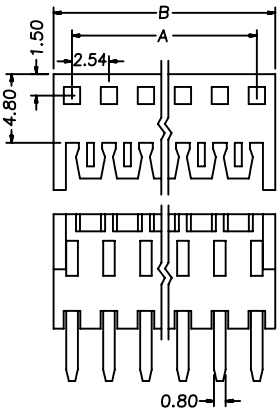


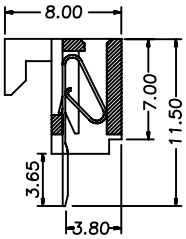


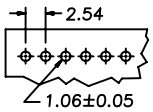
POLES	Dimension A	Dimension B	POLES	Dimension A	Dimension B
02	2.54	5.10	16	38.10	40.66
03	5.08	7.64	17	40.64	43.20
04	7.62	10.18	18	43.18	45.74
05	10.16	12.72	19	45.72	48.28
06	12.70	15.26	20	48.26	50.82
07	15.24	17.80	21	50.80	53.36
08	17.78	20.34	22	53.34	55.90
09	20.32	22.88	23	55.88	58.44
10	22.86	25.42	24	58.42	60.98
11	25.40	27.96	25	60.96	63.52
12	27.94	30.50	26	63.50	66.06
13	30.48	33.04	27	66.04	68.60
14	33.02	35.58	28	68.58	71.14
15	35.56	38.12	29	71.12	73.68

MX-T-xx

Specifications
Current Rating: 2.5A max.
Insulation Resistance: 500M ΩMin.
Dielectric Withstanding: 1500V AC
Contact Resistance: 20mΩ Max.
Operating Temperature:0°C to +75°C
Materials
Contact Material: Phosphor Bronze
Housing:Nylon UL 94V−0

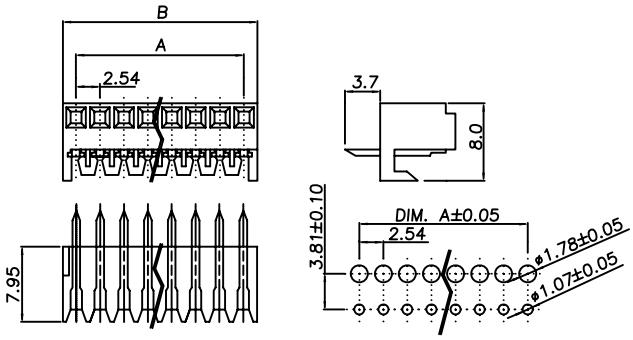






Recommended P.C.Board Hole Layout

MX-B-xx

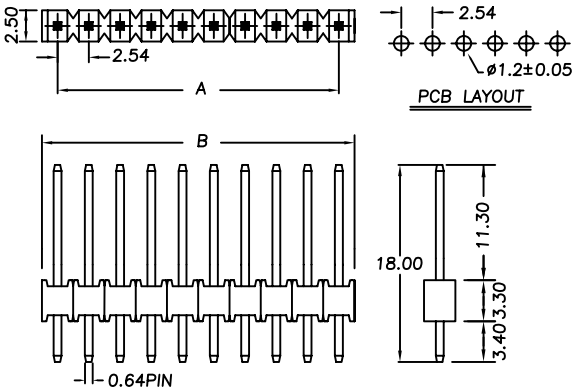


P.C.B LAYOUT

Specifications
Current Rating: 3A AC,DC
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 1500V AC
Contact Resistance: 20mΩ Max.
Operating Temperature:25°C to +85°C
Materials
Contact Material: Phosphor Bronze
Housing:Nylon UL 94V-2

POLES	Dimension A	Dimension B	POLES	Dimension A	Dimension B
02	2.54	5.10	16	38.10	40.66
03	5.08	7.64	17	40.64	43.20
04	7.62	10.18	18	43.18	45.74
05	10.16	12.72	19	45.72	48.28
06	12.70	15.26	20	48.26	50.82
07	15.24	17.80	21	50.80	53.36
08	17.78	20.34	22	53.34	55.90
09	20.32	22.88	23	55.88	58.44
10	22.86	25.42	24	58.42	60.98
11	25.40	27.96	25	60.96	63.52
12	27.94	30.50	26	63.50	66.06
13	30.48	33.04	27	66.04	68.60
14	33.02	35.58	28	68.58	71.14
15	35.56	38.12	29	71.12	73.68

MX-DL-xx



PCB LAYOUT

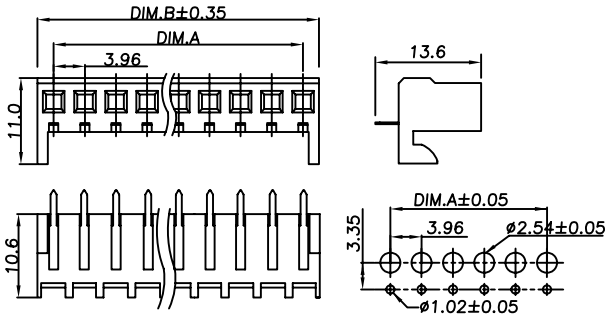
SPECIFICATIONS
Pitch: 2.54mm
Current rating : 3A AC,DC
Voltage rating : 250V AC,DC
Temperature range:-25 C ~+85 C
Insulation resistance : 1000M
Withstanding voltage : 1000V ac

Poles	Dimension A	Dimension B
2	2.54	5.08
3	5.08	7.62
4	7.62	10.16
5	10.16	12.70
6	12.70	15.24
7	15.24	17.78
8	17.78	20.32
9	20.32	22.86
10	22.86	25.40
11	25.40	27.94
12	27.94	30.48
13	30.48	33.02
14	33.02	35.56
15	35.56	38.10
16	38.10	40.64
17	40.64	43.18
18	43.18	45.72
19	45.72	48.26
20	48.26	50.80

3.96mm Board to Board Connectors

KX-B-xx

Materials
Contact Material: Bronze
Housing:Nylon UL 94V-2

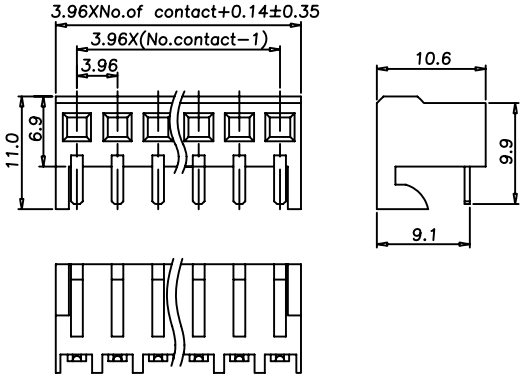


Specifications
Current Rating: 5A max.
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 1500V AC
Dielectric Withstanding Voltage:1500V AC
Contact Resistance: 10mΩ Max.
Operating Temperature:40°C to +105°C

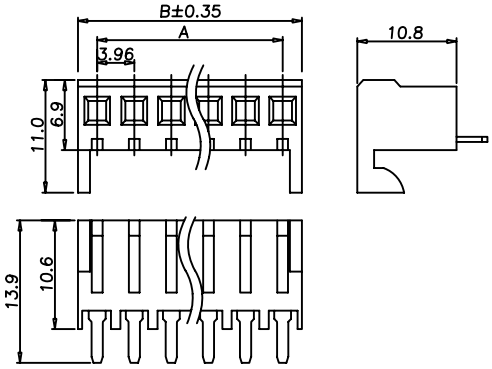
NO.OF CONTACT	Dimension A	Dimension B	NO.OF CONTACT	Dimension A	Dimension B
02	3.96	8.06	10	35.64	39.74
03	7.92	12.02	11	39.60	43.70
04	11.88	15.98	12	43.56	47.66
05	15.84	19.94	13	47.52	51.62
06	19.80	23.90	14	51.48	55.58
07	23.76	27.86	15	55.44	59.54
08	27.72	31.82	16	59.40	63.50
09	31.68	35.78			

KX-S-xx

Specifications
Current Rating: 5A max.
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 1500V AC
Dielectric Withstanding Voltage:1500V AC
Contact Resistance: 10mΩ Max.
Operating Temperature:40°C to +105°C
Materials
Contact Material: Bronze
Housing:Nylon66 UL 94V-2



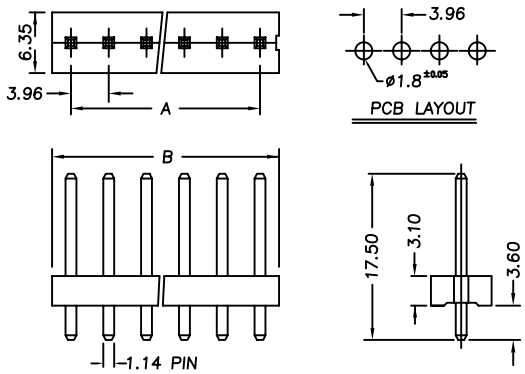
KX-T-xx



Specifications
Current Rating: 5A max.
Insulation Resistance: 1000MΩ Min.
Dielectric Withstanding: 1500V AC
Dielectric Withstanding Voltage:1500V AC
Contact Resistance: 10mΩ Max.
Operating Temperature:40°C to +105°C
Materials
Contact Material: Bronze
Housing:Nylon66 UL 94V-2

NO.OF CONTACT	Dimension A	Dimension B	NO.OF CONTACT	Dimension A	Dimension B
02	3.96	8.06	10	35.64	39.74
03	7.92	12.02	11	39.60	43.70
04	11.88	15.98	12	43.56	47.66
05	15.84	19.94	13	47.52	51.62
06	19.80	23.90	14	51.48	55.58
07	23.76	27.86	15	55.44	59.54
08	27.72	31.82	16	59.40	63.50
09	31.68	35.78			

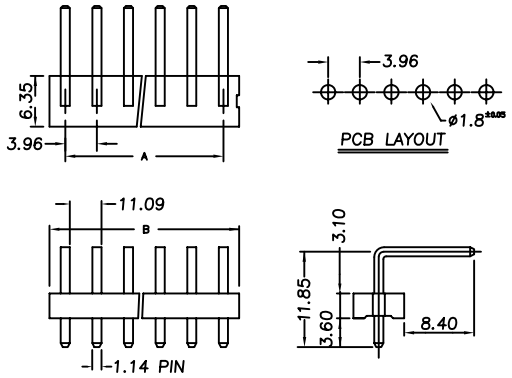
KX-D-xx



SPECIFICATIONS
Current Rating: 5A AC, DC
Voltage Rating: 250V AC, DC
Operating Temp.: -25°C ~ +85°C
Material
Insulation Resistance: 1000MOHM/ min.
Dielectric Withstanding Voltage: 1500V AC/ min.
Contact Resistance: 10mOHM/ max.
Material: Nylon66, UL94V-2

Poles	Dimension A	Dimension B
2	3.96	8.00
3	7.92	12.00
4	11.88	15.90
5	15.84	20.00
6	19.80	24.00
7	23.76	27.90
8	27.72	31.90
9	31.86	35.80
10	35.64	39.90
11	39.60	43.90
12	43.56	47.80
13	47.52	51.80
14	51.48	55.70
15	55.44	59.80
16	59.40	63.80
17	63.36	67.70
18	67.32	71.70
19	71.28	75.60
20	75.24	79.80

KX-R-xx



SPECIFICATIONS
Current Rating: 5A AC, DC
Voltage Rating: 250V AC, DC
Operating Temp.: -25°C ~ +85°C
Material
Insulation Resistance: 1000MOHM/ min.
Dielectric Withstanding Voltage: 1500V AC/ min.
Contact Resistance: 10mOHM/ max.
Material: Nylon66, UL94V-2

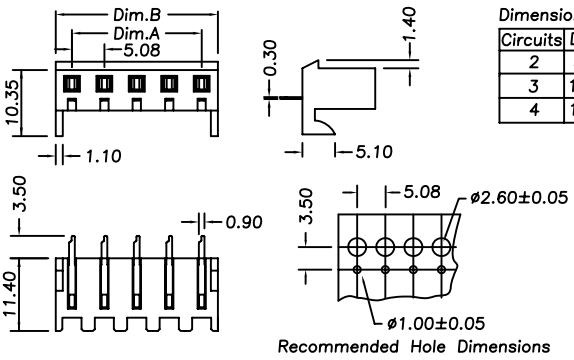
Poles	Dimension A	Dimension B
2	3.96	8.00
3	7.92	12.00
4	11.88	15.90
5	15.84	20.00
6	19.80	24.00
7	23.76	27.90
8	27.72	31.90
9	31.86	35.80
10	35.64	39.90
11	39.60	43.90
12	43.56	47.80
13	47.52	51.80
14	51.48	55.70
15	55.44	59.80
16	59.40	63.80
17	63.36	67.70
18	67.32	71.70
19	71.28	75.60
20	75.24	79.80

5.08mm Board to Board Connectors

LKX-B-xx

FEATURES:
. 2-20 Circuits
. Housing, UL 94V-2 Nylon 6/6, Natural
. Desiged for parallel and perpendicular board

SPECIFICATIONS:
. Current rating: 7A AC. DC
. Voltage rating: 250V AC. Maximum
. Temperatur range: -40°C ~ +105°C
. Contact resistance: Initial Value/10mΩ max.
After environmental testing/20mΩ max.
. Insulation resistance: 5000 MΩ min
. Withstand Voltage: 1500V AC/minute
. Applicable PC board thickness: .063"[1.6mm]



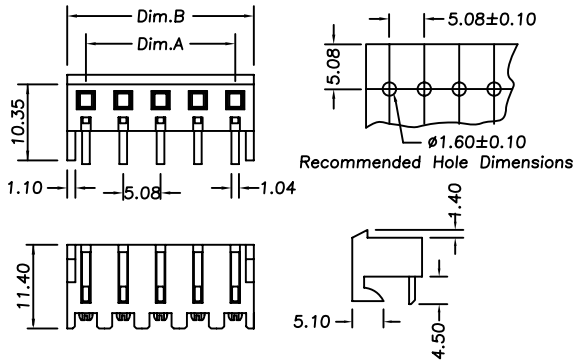
Dimensional

Circuits	Dim.A	Dim.B
2	5.08	10.16
3	10.16	15.24
4	15.24	20.32

LKX-S-xx

FEATURES:
. 2–20 Circuits
. Housing, UL 94V–2 Nylon 6/6, Natural
. Desiged for parallel and perpendicular board

SPECIFICATIONS:
. Current rating: 7A AC. DC
. Voltage rating: 250V AC. Maximum
. Temperatur range: –40°C ~ +105°C
. Contact resistance: Initial Value/10mΩ max.
After environmental testing /20m Ωmax.
. Insulation resistance: 5000 MΩ min
. Withstand Voltage: 1500V AC/minute
. Applicable PC board thickness: .063"[1.6mm]



Dimensional Information

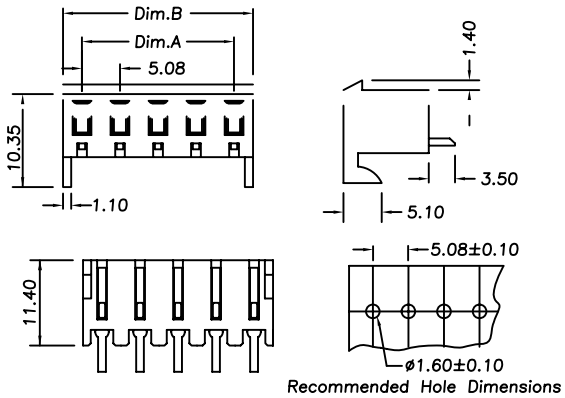
Circuits	Dim.A	Dim.B	Circuits	Dim.A	Dim.B	Circuits	Dim.A	Dim.B
2	5.08	10.16	3	10.16	15.24	4	15.24	20.32

LKX Series
* FOR CIRCUIT SIZES 4 THROUGHT 20 ADD .200" OR 5.08MM FOR EACH ADDITIONAL PIN.

LKX-T-xx

FEATURES:
. 2–20 Circuits
. Housing, UL 94V–2 Nylon 6/6, Natural
. Desiged for parallel and perpendicular board

SPECIFICATIONS:
. Current rating: 7A AC. DC
. Voltage rating: 250V AC. Maximum
. Temperatur range: –40°C ~ +105°C
. Contact resistance: Initial Value/10mΩ max.
After environmental testing/20mΩ max.
. Insulation resistance: 5000 MΩ min
. Withstand Voltage: 1500V AC/minute
. Applicable PC board thickness: .063"[1.6mm]

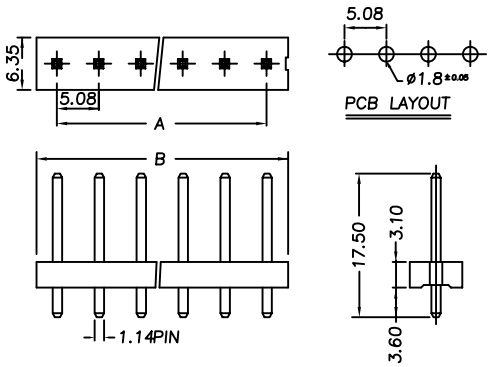


Dimensional Information

Circuits	Dim.A	Dim.B
2	5.08	10.16
3	10.16	15.24
4	15.24	20.32

LKX-D-xx

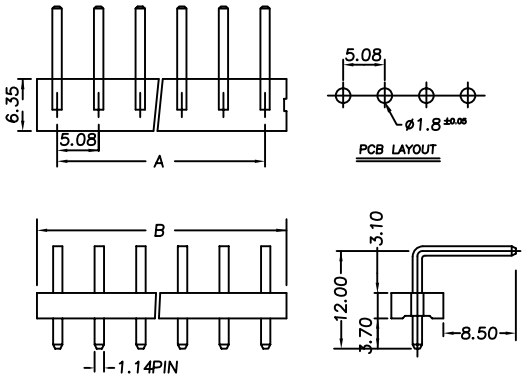
SPECIFICATIONS
Electrical
Current Rating: 5A AC, DC
Voltage Rating: 250V AC, DC
Operating Temp.: –25°C ~ +85°C
Insulation Resistance: 1000M OHM/ min.
Dielectric Withstanding Voltage: 1500V AC/ min.
Contact Resistance: 10m ohm/ max.
Material
Material: Nylon66, UL94V–2



Poles	Dimension A	Dimension B
2	5.08	10.30
3	10.16	15.40
4	15.24	20.50
5	20.32	25.60
6	25.40	30.70
7	30.48	35.80
8	35.56	41.00
9	40.64	46.10
10	45.72	51.20
11	50.80	56.30
12	55.88	61.40

LKX-R-xx

SPECIFICATIONS
Electrical
Current Rating: 5A AC, DC
Voltage Rating: 250V AC, DC
Operating Temp.: –25°C ~ +85°C
Insulation Resistance: 1000M OHM/ min.
Dielectric Withstanding Voltage: 1500V AC/ min.
Contact Resistance: 10m ohm/ max.
Material
Material: Nylon66, UL94V–2



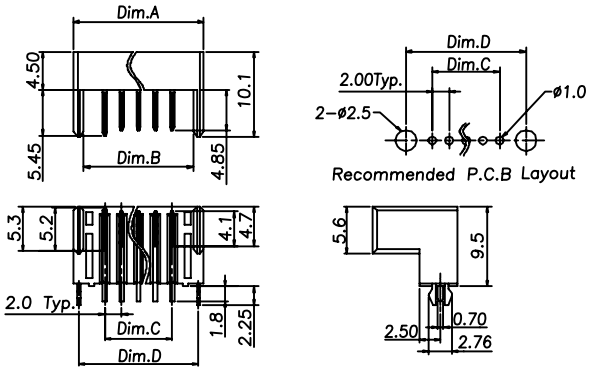
Poles	Dimension A	Dimension B
2	5.08	10.30
3	10.16	15.40
4	15.24	20.50
5	20.32	25.60
6	25.40	30.70
7	30.48	35.80
8	35.56	41.00
9	40.64	46.10
10	45.72	51.20
11	50.80	56.30
12	55.88	61.40

Battery Connectors

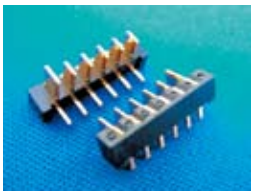
BCT20-PR095Z-xx

Nates
1.Materidl:
Housing:Thermoplastic UL 94V-0,Black
Contact: 5u" min, gold on matiog area.
80u" min. Tin/Lead on solder tail
Both ouer 50u" min Ni under-plated ouerall
Forklock: 80u" min Tin/Lead ouer 50u" min, ni.
under0-plated ouerall.
Recommended P.C.B thickness=1.0~1.2mm

Poles	Dim.A	Dim.B	Dim.C	Dim.D
5	15.50	13.00	8.00	14.25
6	17.50	15.00	10.00	16.25
7	19.50	17.00	12.00	18.25
8	21.50	19.00	14.00	20.25
9	23.50	21.00	16.00	22.25
10	25.50	23.00	18.00	24.25



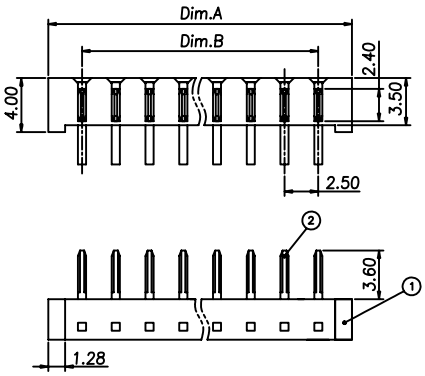
BCC25-PR40-xx

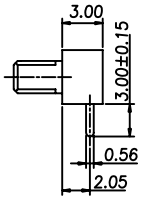


Notes:
1.Housing: Nylon 9T+30% GF.,UL 94V-0 Black
2.Terminal: C2680-H H:0.06±0.02mm

Dimension

Poles	Dim.A	Dim.B
03	10.00	5.00
04	12.50	7.50
05	15.00	10.00
06	17.50	12.50
07	20.00	15.00
08	22.50	17.50
09	25.00	20.00
10	27.50	22.50





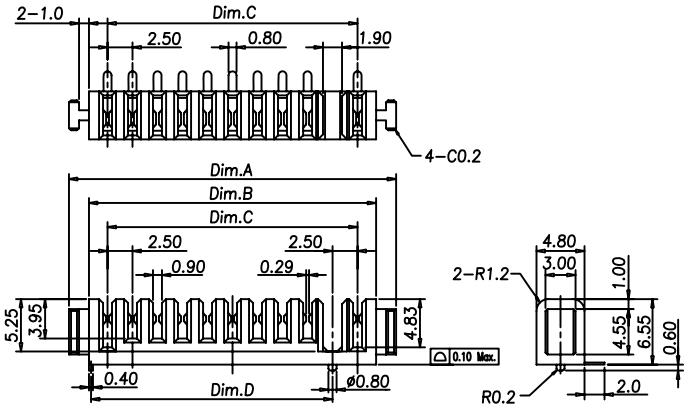
項次	名稱	數量
1	Housing	1
2	Terminal	Amount of Pins

BCC25-SV65R2P-xx

Notes:
1.Housing: Nylon 9T+30% GF.,UL 94V-0 Black
2.Terminal: C5191-H H:0.2±0.01mm

Dimension

Poles	Dim.A	Dim.B	Dim.C	Dim.D
04	17.70	13.70	10.00	9.15
05	20.20	16.20	12.50	11.65
06	22.70	18.70	15.00	14.15
07	25.20	21.20	17.50	16.65
08	27.70	23.70	20.00	19.15
09	30.20	26.20	22.50	21.65
10	32.70	28.70	25.00	24.15

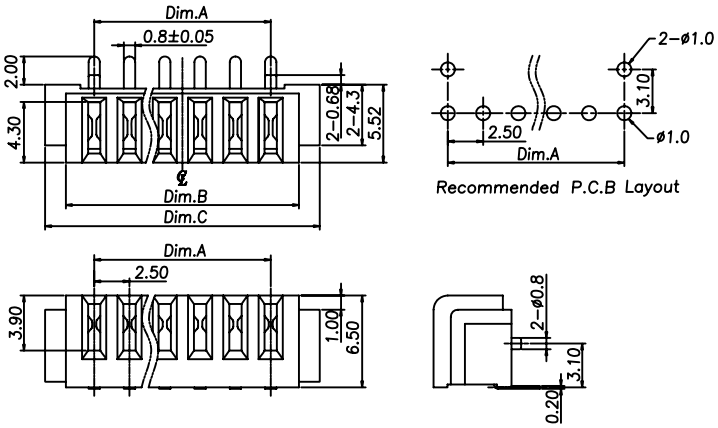


BCC25-SR20P-xx

Notes:
1.Housing: Thermoplastic 94V-0
2.Terminal: Copper Alloy

Dimension

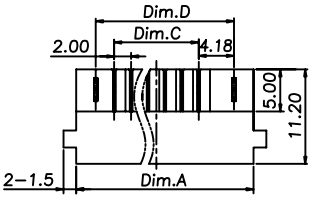
Poles	Dim.A	Dim.B	Dim.C
03	5.00	9.00	11.95
04	7.50	11.50	14.45
05	10.00	14.00	16.95
06	12.50	16.50	19.45
07	15.00	19.00	21.95
08	17.50	21.50	24.45
09	20.00	24.00	26.95
10	22.50	26.50	29.45
11	25.00	29.00	31.95

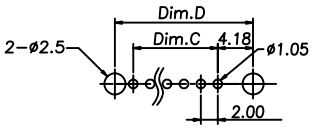


BCT20-SR39Z-xx

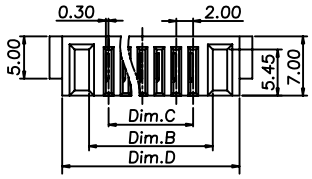
Notes:
1.Housing: Thermoplastic 94V-0
2.Terminal: Copper Alloy

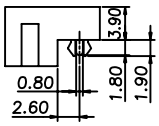
Poles	Dim.A	Dim.B	Dim.C	Dim.D
3	15.00	8.65	4.00	10.35
4	17.00	10.65	6.00	12.35
5	19.00	12.65	8.00	14.35
6	21.00	14.65	10.00	16.35
7	23.00	16.65	12.00	18.35
8	25.00	18.65	14.00	20.35



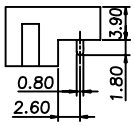


Recommended P.C.Board Layout





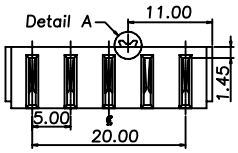
BCT20-SR39Z-xx
With Forklock

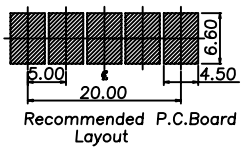


BCT20-SR39-xx
Without Forklock

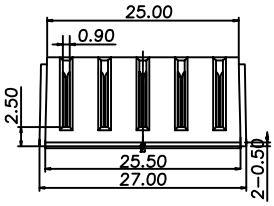
BCC50-SV118-05

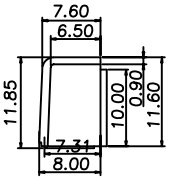
Notes:
1.Housing: Thermoplastic UL 94V-0 Black
2.Terminal: Copper Alloy

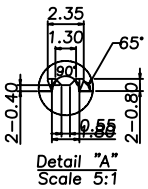




Recommended P.C.Board Layout





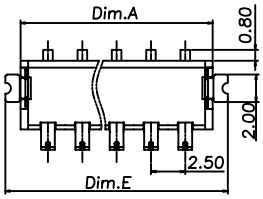


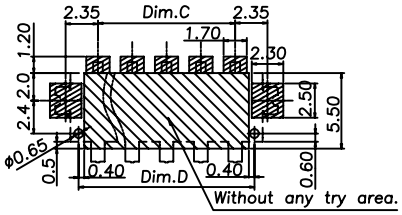
BCS25-W65P-xx

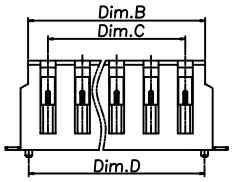
Notes:
1.Housing: Thermoplastic UL 94V-0 Black
2.Terminal: Copper Alloy

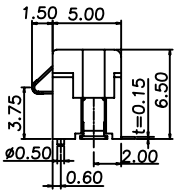
Dimension

Poles	Dim.A	Dim.B	Dim.C	Dim.D	Dim.E
3	9.00	7.90	5.00	7.80	11.20
4	11.50	10.40	7.50	10.30	13.70
5	14.00	12.90	10.00	12.80	16.20
6	16.50	15.40	12.50	15.30	18.70
7	19.00	17.90	15.00	17.80	21.20
8	21.50	20.40	17.50	20.30	23.70





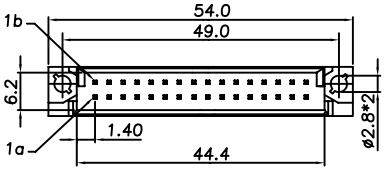


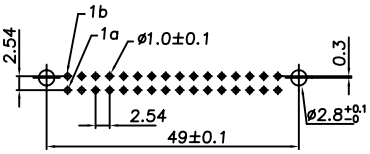


DIN 41612 Connectors

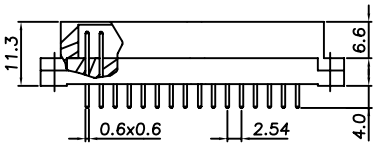
UB-PD-2X16

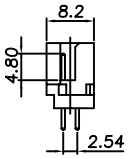
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Brass (Male)
Phosphor Bronze (Female)





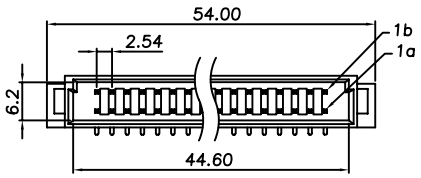
ELECTRICAL
Operation voltage: 250 VAC max.
Current rating: 1 Amps max.
Contact resistance: 20 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55℃ TO +125℃

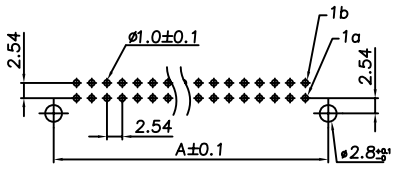




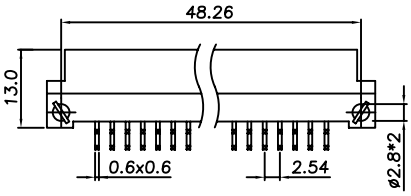
UB-PR-2X16

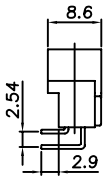
SPECIFICATION
MATERIAL
Insulator: PBT & glass fiber , rated UL94V-0
Contacts: Brass Gold plated





RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm

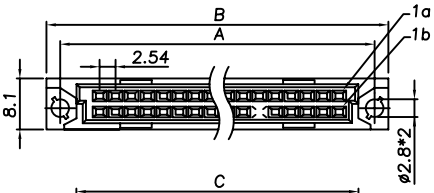


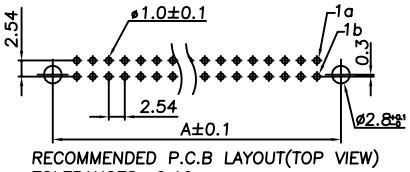


ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55 ℃ TO +125 ℃

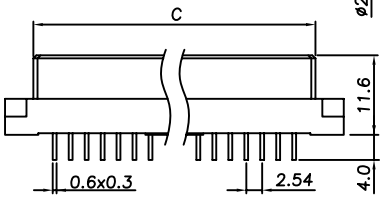
UB-SD-2X16

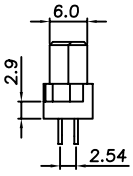
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze





RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm





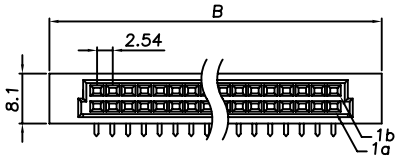
NOTE:

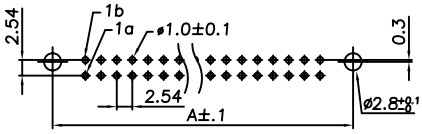
PART NO.	A	B	C
UB-SD-2X32	90	95	85
UB-SD-2X16	50	54	44

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55 ℃ TO +125 ℃

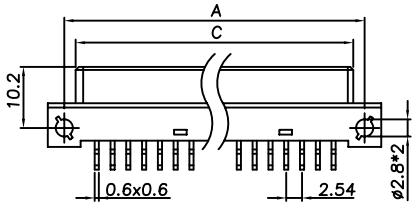
UB-SR-2X16

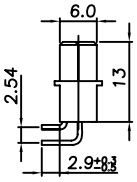
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze





RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm





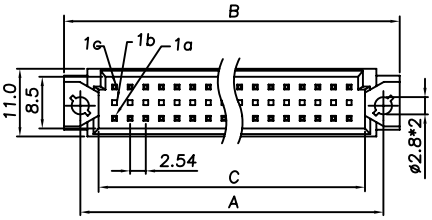
NOTE:

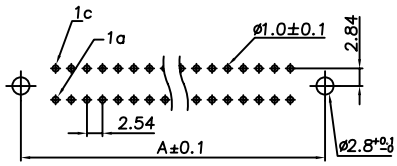
POSITION	A	B	C
UB-SR-2X32	88.90	94	85.0
UB-SR-2X16	48.20	53	44.4

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55 ℃ TO +125 ℃

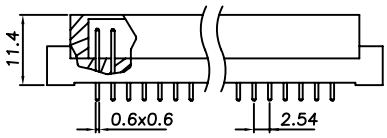
UC-PD-2X16

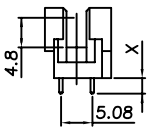
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze





RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm





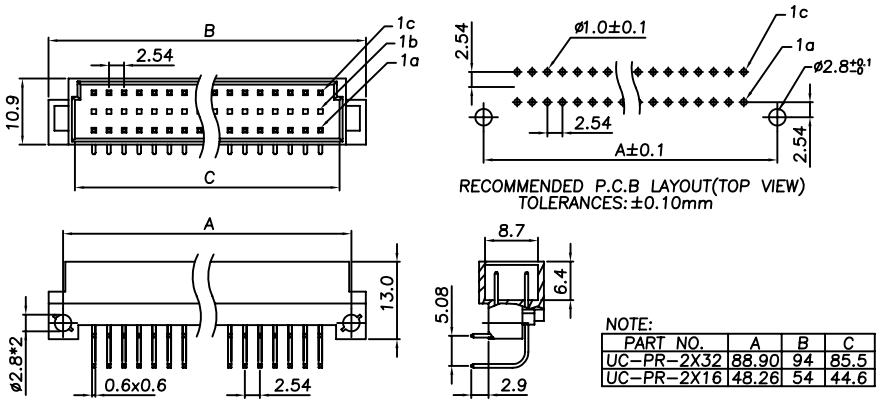
NOTE:

PART NO.	A	B	C
UC-PD-2X32	90.0	95.0	85.5
UC-PD-2X16	50.0	53.5	44.6

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55 ℃ TO +125 ℃

UC-PR-2X16

SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze



RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm

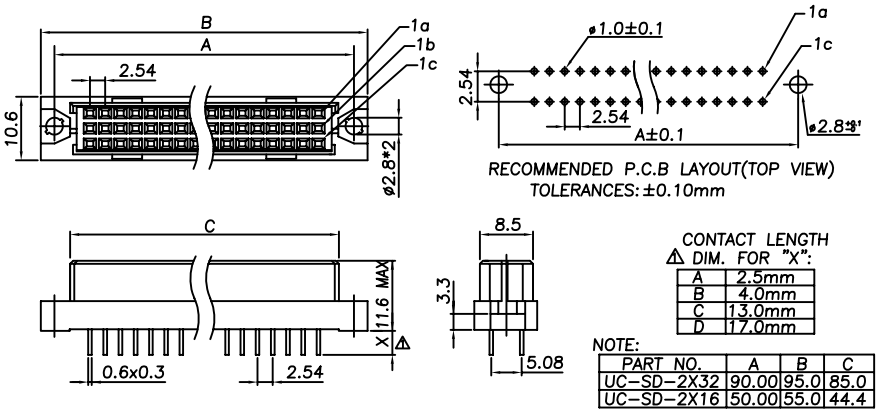
ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C

NOTE:

PART NO.	A	B	C
UC-PR-2X32	88.90	94	85.5
UC-PR-2X16	48.26	54	44.6

UC-SD-2X16

SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze



RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm

CONTACT LENGTH
⚠ DIM. FOR "X":

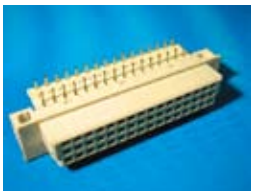
A	2.5mm
B	4.0mm
C	13.0mm
D	17.0mm

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C

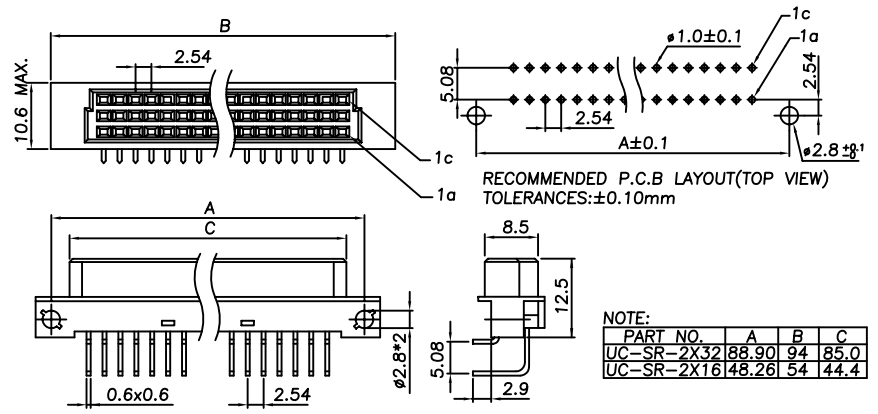
NOTE:

PART NO.	A	B	C
UC-SD-2X32	90.00	95.0	85.0
UC-SD-2X16	50.00	55.0	44.4

UC-SR-2X16



SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze



RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES:±0.10mm

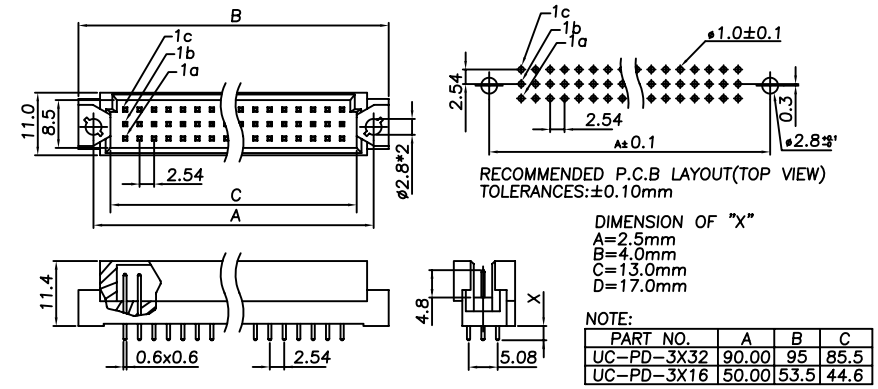
ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C

NOTE:

PART NO.	A	B	C
UC-SR-2X32	88.90	94	85.0
UC-SR-2X16	48.26	54	44.4

UC-PD-3X16

SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze



RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES:±0.10mm

DIMENSION OF "X"
A=2.5mm
B=4.0mm
C=13.0mm
D=17.0mm

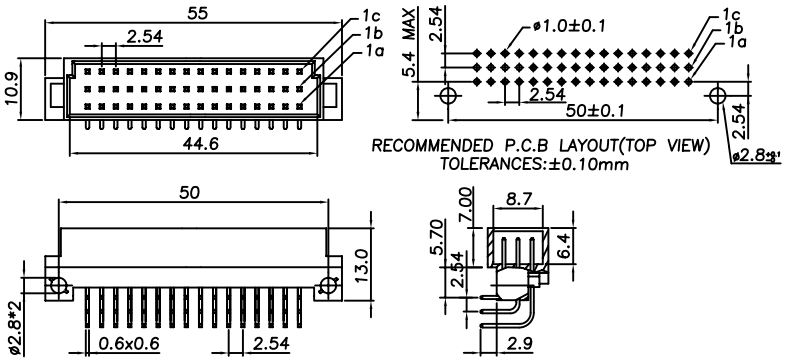
ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C

NOTE:

PART NO.	A	B	C
UC-PD-3X32	90.00	95	85.5
UC-PD-3X16	50.00	53.5	44.6

UC-PR-3X16

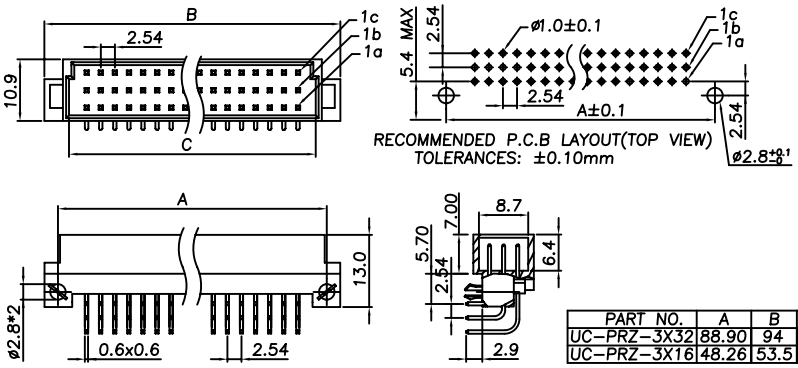
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze



ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +125°C

UC-PRZ-3X16

SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze

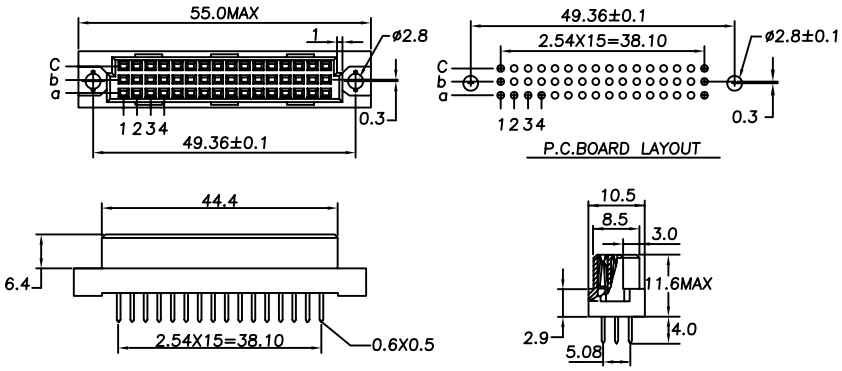


PART NO.	A	B	C
UC-PRZ-3X32	88.90	94	85.5
UC-PRZ-3X16	48.26	53.5	44.6

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +125°C

UC-SD-3X16

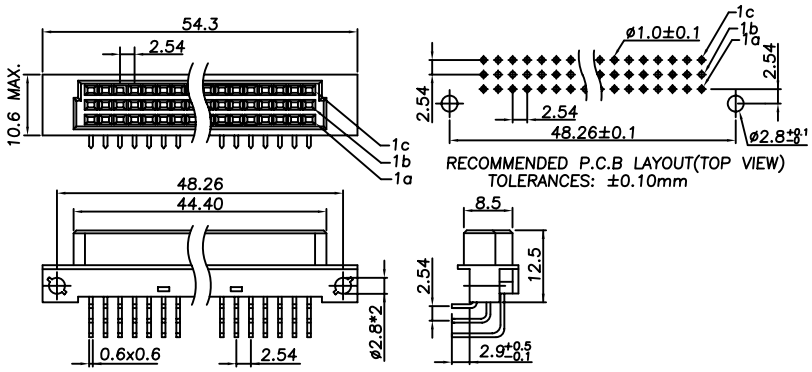
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze



ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +125°C

UC-SR-3X16

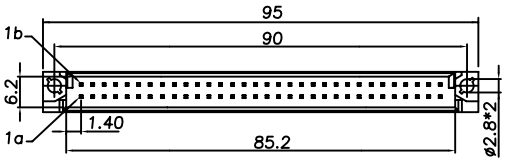
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze

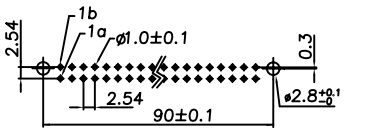


ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +125°C

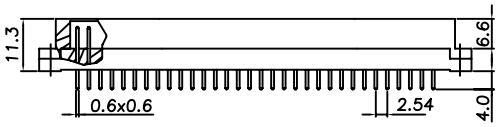
UB-PD-2X32

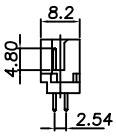
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze





RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES:±0.10mm

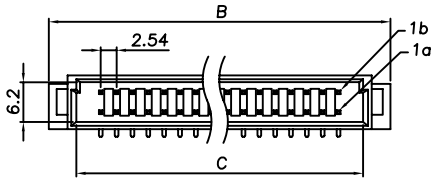


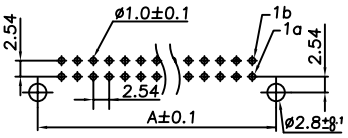


ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +125°C

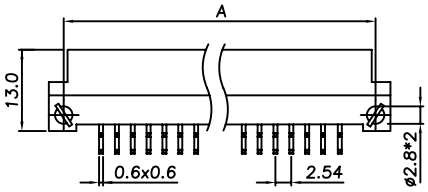
UB-PR-2X32

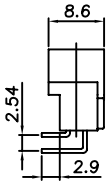
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze





RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm





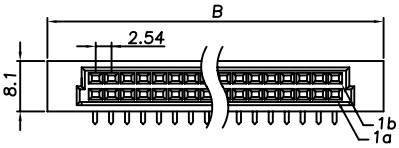
NOTE:

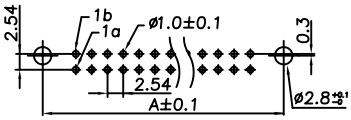
PART NO.	A	B	C
UB-PR-2X32	88.90	94	85.5
UB-PR-2X16	48.26	54	44.6

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +125°C

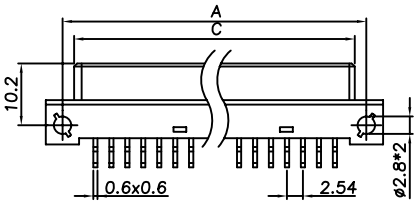
UB-SD-2X32

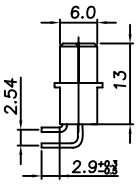
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze





RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm





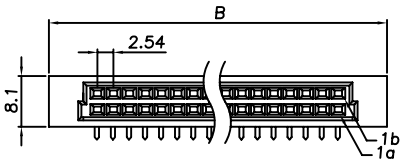
NOTE:

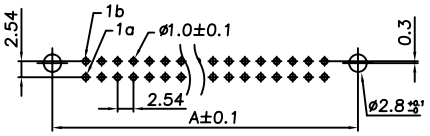
POSITION	A	B	C
UB-SR-2X32	88.90	94	85.0
UB-SR-2X16	48.20	53	44.4

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +125°C

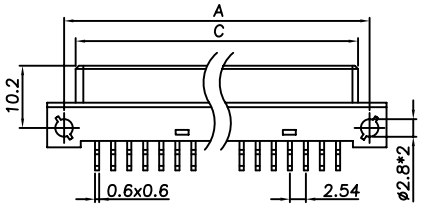
UB-SR-2X32

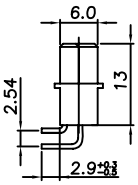
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze





RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm





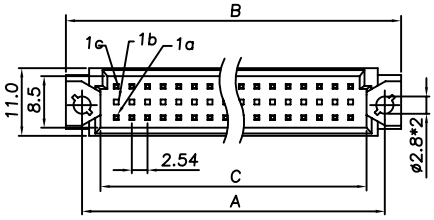
NOTE:

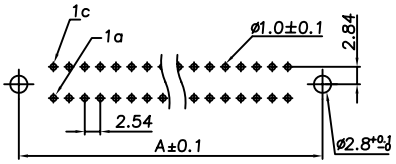
POSITION	A	B	C
UB-SR-2X32	88.90	94	85.0
UB-SR-2X16	48.20	53	44.4

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +125°C

UC-PD-2X32

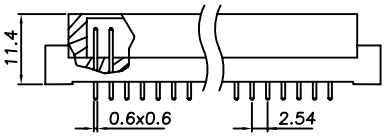
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze

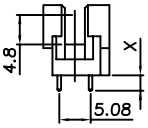




RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES:±0.10mm

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C



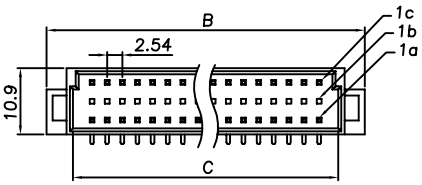


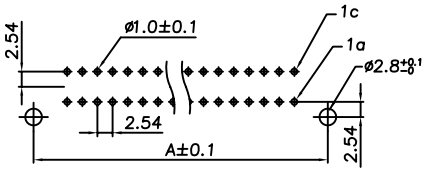
NOTE:

PART NO.	A	B	C
UC-PD-2X32	90.0	95.0	85.5
UC-PD-2X16	50.0	53.5	44.6

UC-PR-2X32

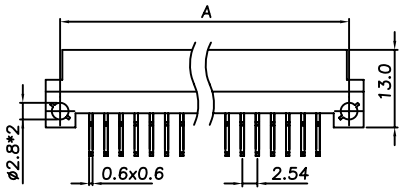
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze

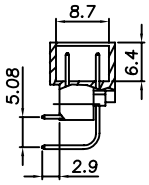




RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES:±0.10mm

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C

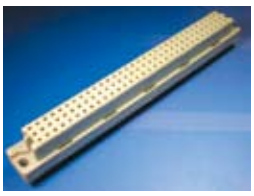




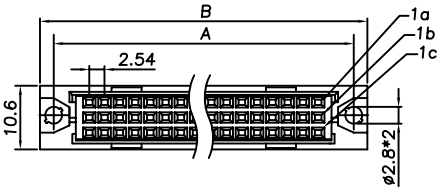
NOTE:

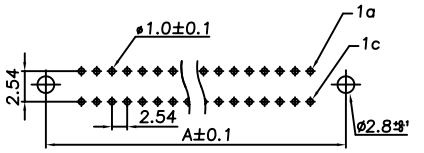
PART NO.	A	B	C
UC-PR-2X32	88.90	94	85.5
UC-PR-2X16	48.26	54	44.6

UC-SD-2X32



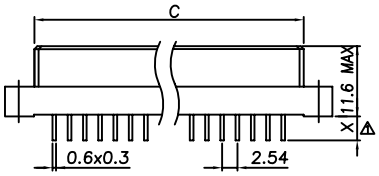
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze

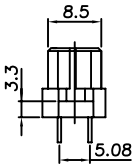




RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES:±0.10mm

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C





CONTACT LENGTH
⚠ DIM. FOR "X":

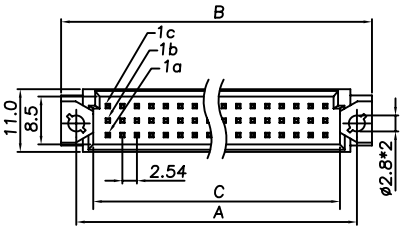
A	2.5mm
B	4.0mm
C	13.0mm
D	17.0mm

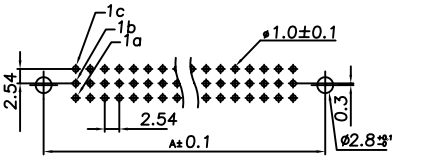
NOTE:

PART NO.	A	B	C
UC-SD-2X32	90.00	95.0	85.0
UC-SD-2X16	50.00	55.0	44.4

UC-PD-3X32

SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze

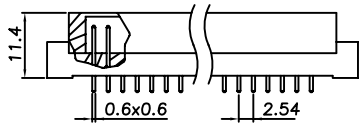


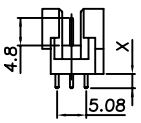


RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES:±0.10mm

DIMENSION OF "X"
A=2.5mm
B=4.0mm
C=13.0mm
D=17.0mm

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C

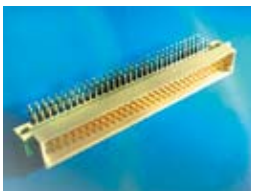




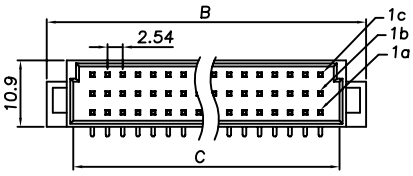
NOTE:

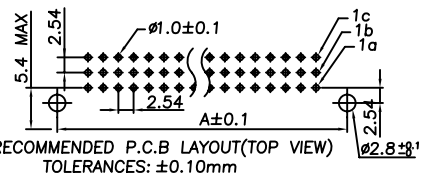
PART NO.	A	B	C
UC-PD-3X32	90.00	95	85.5
UC-PD-3X16	50.00	53.5	44.6

UC-PR-3X32



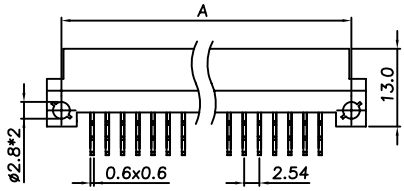
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze

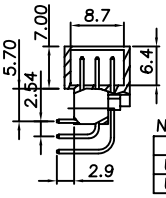




RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C

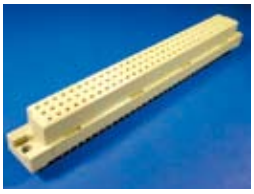




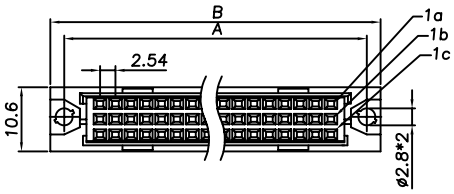
NOTE:

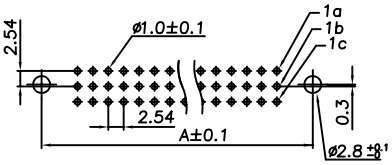
PART NO.	A	B	C
UC-PR-3X32	88.90	94	85.5
UC-PR-3X16	50.00	55	44.6

UC-SD-3X32



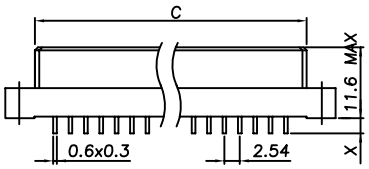
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze

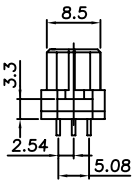




RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm

ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C





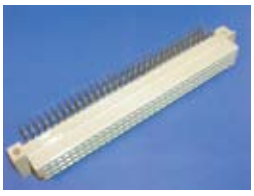
CONTACT LENGTH
DIM. FOR "X":

A	2.5mm
B	4.0mm
C	13.0mm
D	17.0mm

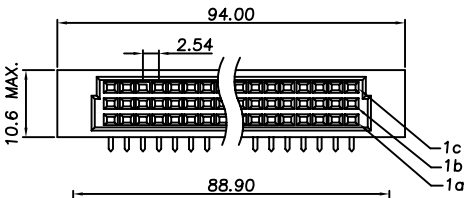
NOTE:

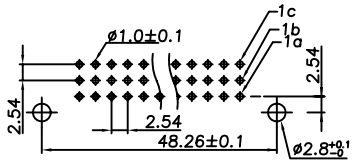
PART NO.	A	B	C
UC-SD-3X32	90.0	95.0	85.0
UC-SD-3X16	49.0	54.3	44.4

UC-SR-3X32



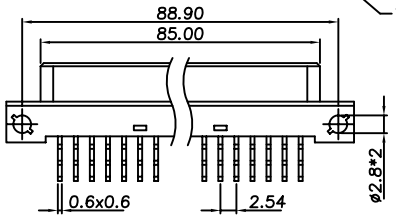
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze

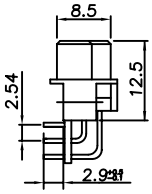




RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm

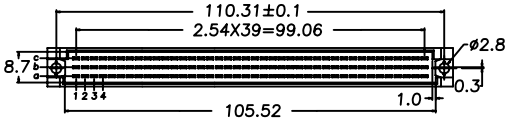
ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +125°C

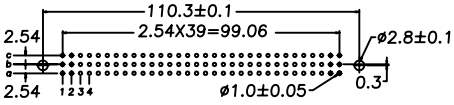




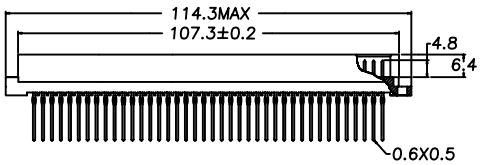
UC-PP13-3X40

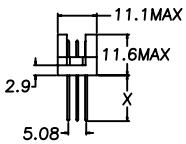
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze
ELECTRICAL
Current rating: 2 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +105°C





P.C.Board Layout

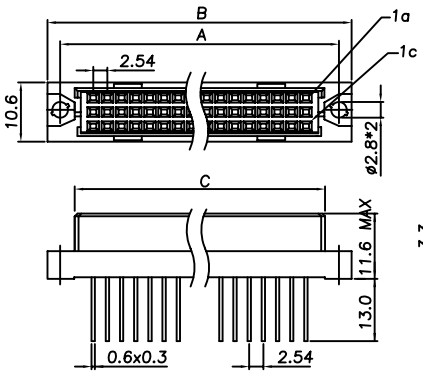


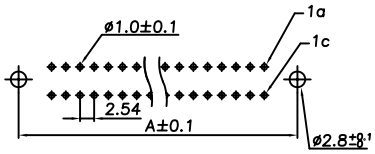


X length	1	2	W1	W2
	4.0	2.5	13	17

UC-SD13-2X32

SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Brass (Male)
Phosphor Bronze (Female)





RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm

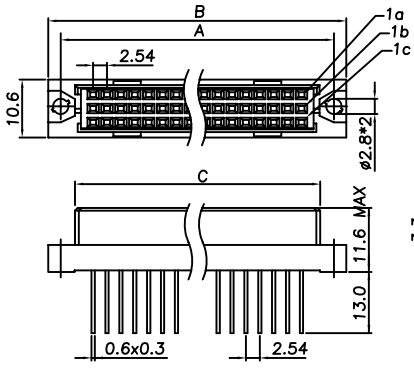
ELECTRICAL
Operation voltage: 250 VAC max.
Current rating: 3 Amps max.
Contact resistance: 20 mohms max.
Insulation resistance: 3000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +105°C

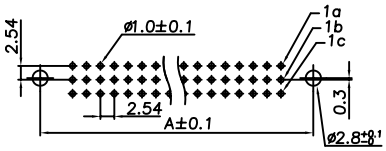
NOTE:

PART NO.	A	B	C
UC-SD13-2X32	90.0	95.0	85.0
UC-SD13-2X16	49.0	54.3	44.4

UC-SD13-3X32

SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Brass (Male)
Phosphor Bronze (Female)





RECOMMENDED P.C.B LAYOUT(TOP VIEW)
TOLERANCES: ±0.10mm

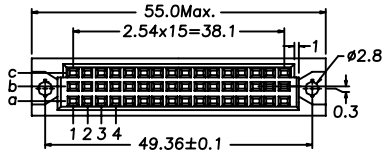
ELECTRICAL
Operation voltage: 250 VAC max.
Current rating: 3 Amps max.
Contact resistance: 20 mohms max.
Insulation resistance: 3000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +105°C

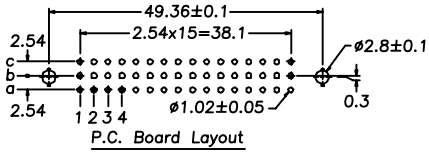
NOTE:

PART NO.	A	B	C
UC-SD13-3X32	90.0	95.0	85.0
UC-SD13-3X16	49.0	54.3	44.4

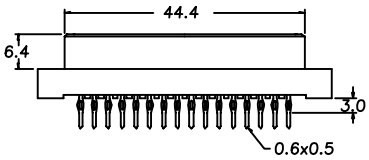
UC-SP-3X16

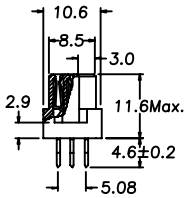
SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze





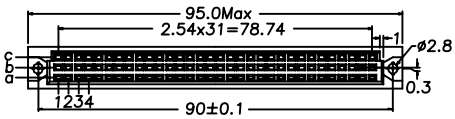
P.C. Board Layout

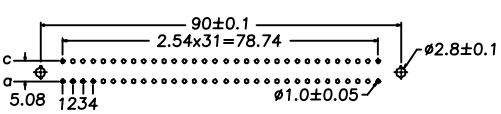




ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +105°C

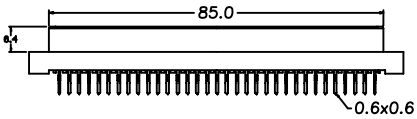
UC-SP-2X32

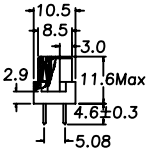




P.C. Board Layout

SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze
ELECTRICAL

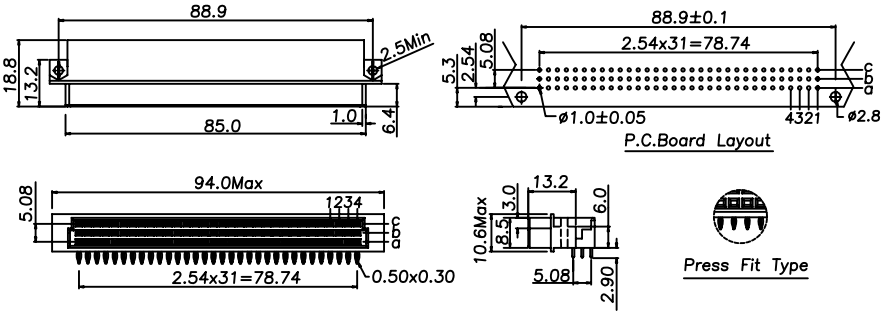




Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: -55°C TO +125°C

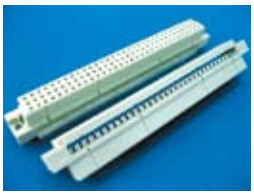
UC-SQ-3X32

SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze

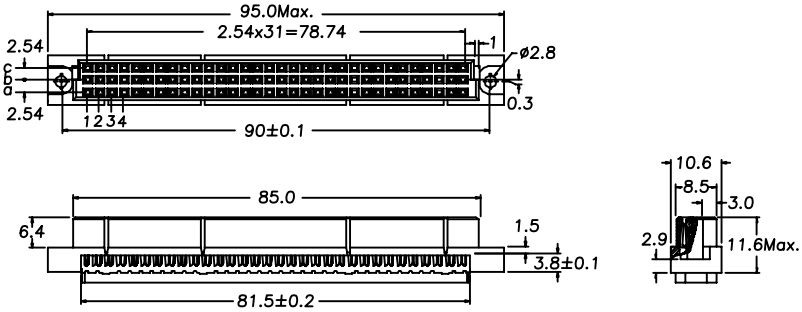


ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +105°C

UC-SF-2X32

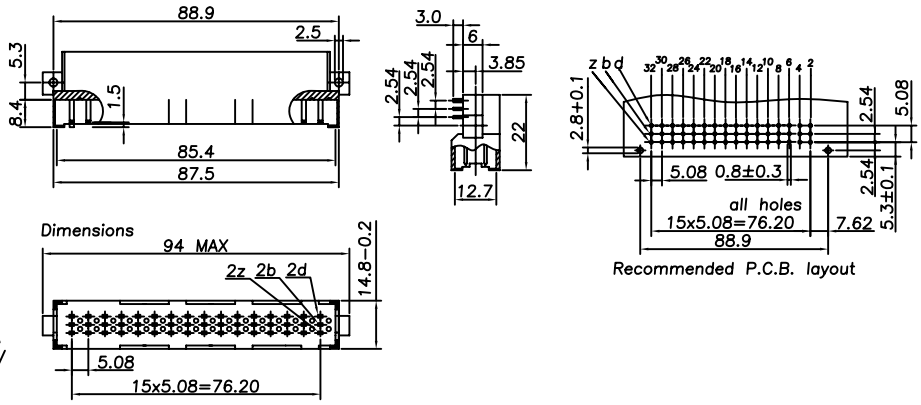


SPECIFICATION
MATERIAL
Insulator: PBT, rated UL94V-0
Contacts: Phosphor Bronze



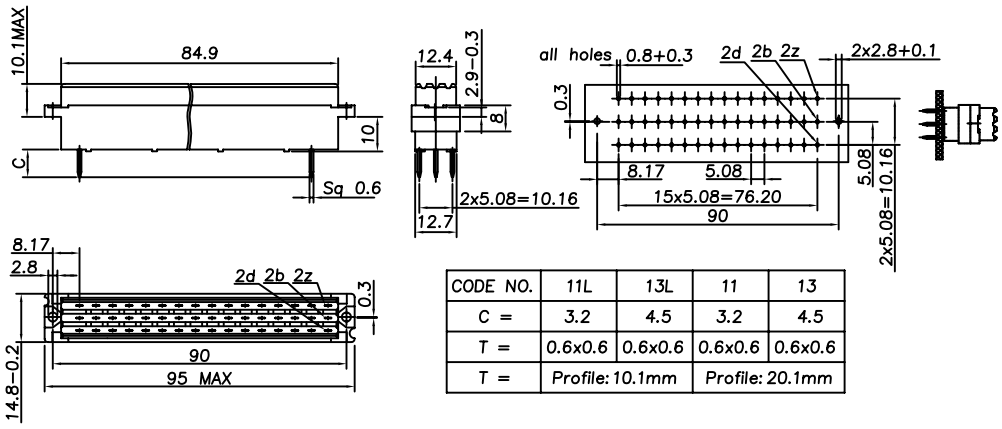
ELECTRICAL
Current rating: 1 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Dielectric withstanding voltage: 1000 VAC / minute
Operating temperature: −55°C TO +105°C

UF-PR-3X16



Technial data
Housing: PBT & 30%Class Fiber(UL94-0)
Contact: Male : Phosphor Bronze
Operating temperature: −55°C~+105°C
Contact resistance: 30m(ohm)max.at DC 100mA
Insulator resistance: 1000M(ohm)min.at DC 500V
Current rating: 5.6 AMP
Withstanding voltage: AC 1000V for 1 minute

UF-SDH-3X16

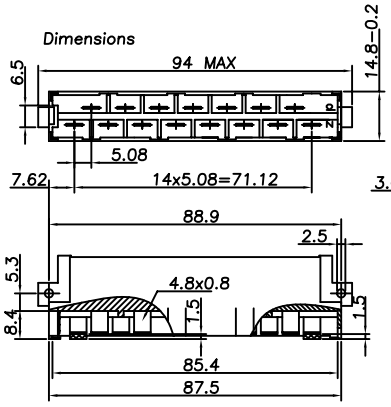


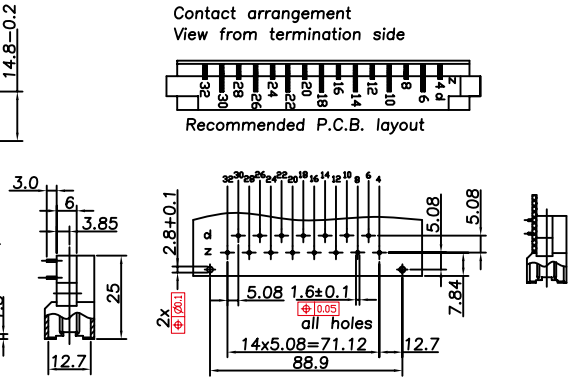
Technial data
Housing: PBT & 30%Class Fiber(UL94-0)
Contact: Female : Phospher Bronze
Operating temperature: −55°C~+105°C
Contact resistance: 30m(ohm)max.at DC 100mA
Insulator resistance: 1000M(ohm)min.at DC 500V
Current rating: 5.6 AMP
Withstanding voltage: AC 1000V for 1 minute
Insertion force: 75N max
Withdrawal force: 0.15N/pin min
Contact Rating: Selective Gold ,Plating

CODE NO.	11L	13L	11	13
C =	3.2	4.5	3.2	4.5
T =	0.6x0.6	0.6x0.6	0.6x0.6	0.6x0.6
T =	Profile: 10.1mm		Profile: 20.1mm	

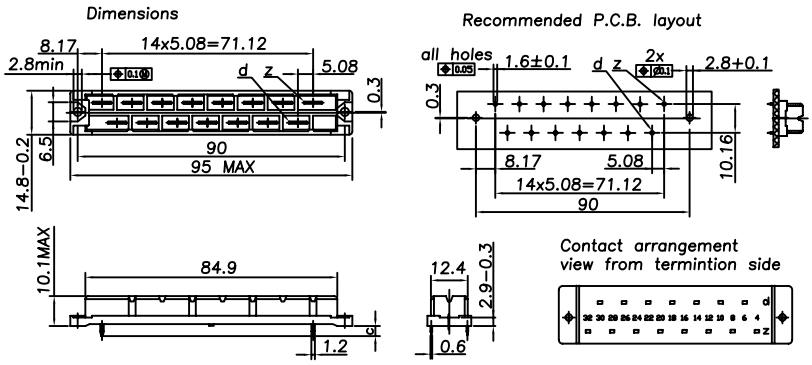
UH-PRPM-15

Technial data
Housing: PBT & 30%Class Fiber(UL94-0)
Contact: Female : Male Brass
Operating temperature: -55°C~+105°C
Contact resistance: 8m(ohm)max.at DC 100mA
Insulator resistance: 1000M(ohm)min.at DC 500V
Current rating: 15 AMP
Withstanding voltage: AC 3100V for 1 minute
Insertion force: 90N max





UH-SD-15



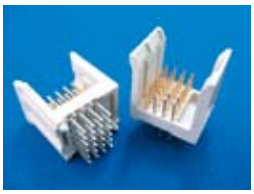
CODE NO.	12	16
C =	4.0	10
T =	0.6x1.2	0.6x1.2

Ordering Information

NO. OF CONTACTS	15
POSITION	d+z
TERMINATION	PART NUMBER
4.0 mm	UH-SD-15
10.0 mm	UH-SD10-15

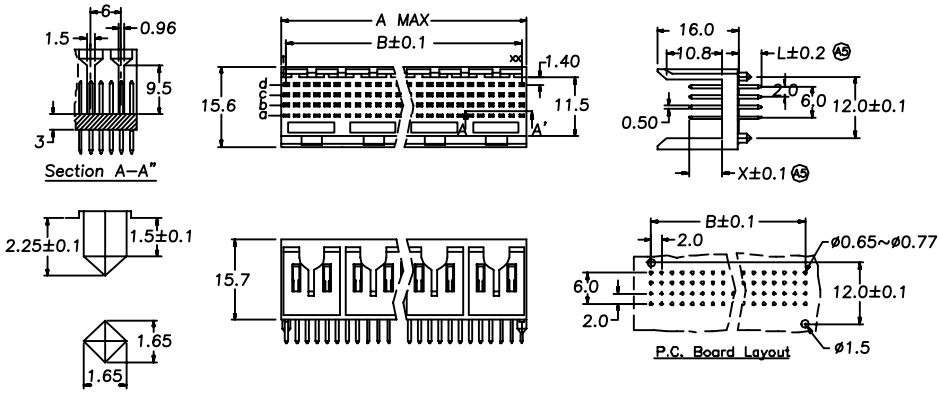
Future Bus Connectors

FUB-PD0450-4Xxx

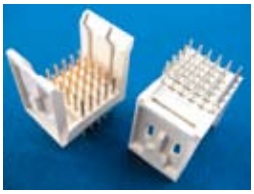


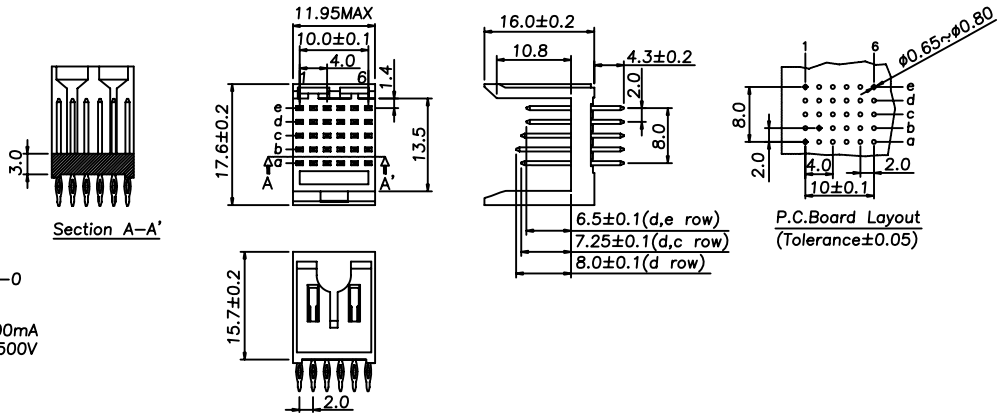
L	X
4.3	5.0
	5.75
	6.5
	7.25
	8.0
13.6	5.0
	5.75
	6.5
	7.25
	8.0
17.0	5.0
	5.75
	6.5
	7.25
	8.0

Position	Dim ension A	B
24	11.95	10
48	23.95	22
72	35.95	34
96	47.95	46
120	59.95	58
144	71.95	70
168	83.95	82
192	95.95	94



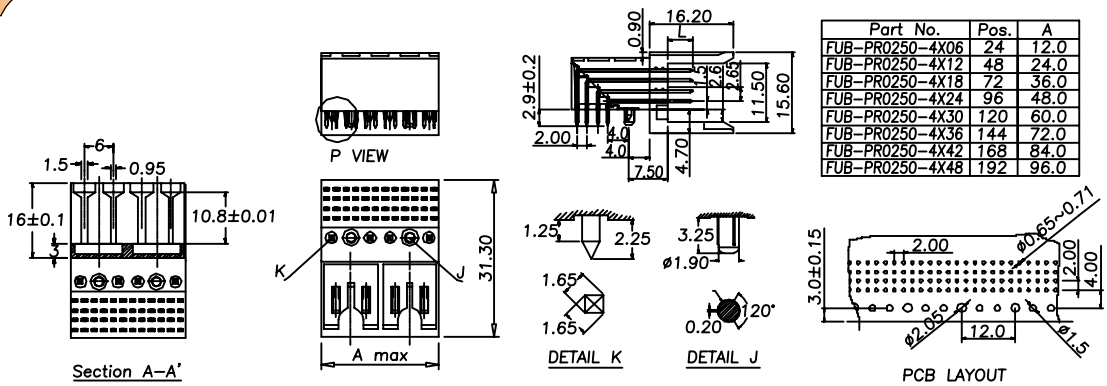
FUB-PP0478766-5X06





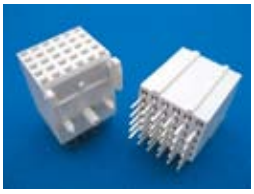
Material:
Housing: Liquid Crystal Polymer(LCP) UL94V-0
Contacts:Brass
Operating temperature: -65°C~+125°C
Contact resistance: 30m ohmmin. at DC 100mA
Insulator resistance: 1000M(ohm)min.at DC 500V
Current rating: 1 AMP.

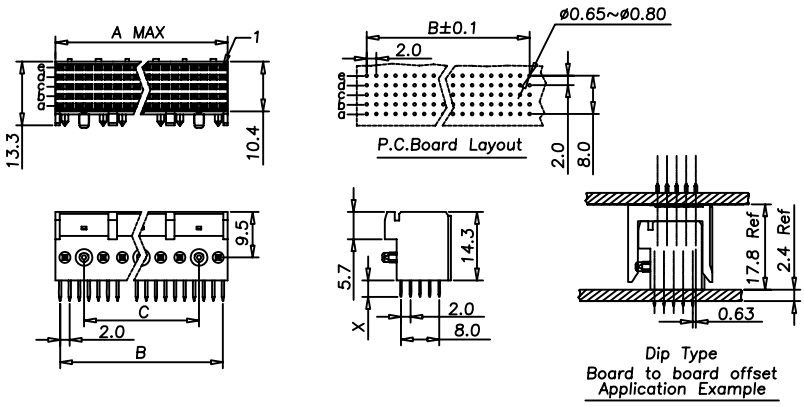
FUB-PR0250-4Xxx



Part No.	Pos.	A
FUB-PR0250-4X06	24	12.0
FUB-PR0250-4X12	48	24.0
FUB-PR0250-4X18	72	36.0
FUB-PR0250-4X24	96	48.0
FUB-PR0250-4X30	120	60.0
FUB-PR0250-4X36	144	72.0
FUB-PR0250-4X42	168	84.0
FUB-PR0250-4X48	192	96.0

FUB-SDxx-5Xxx

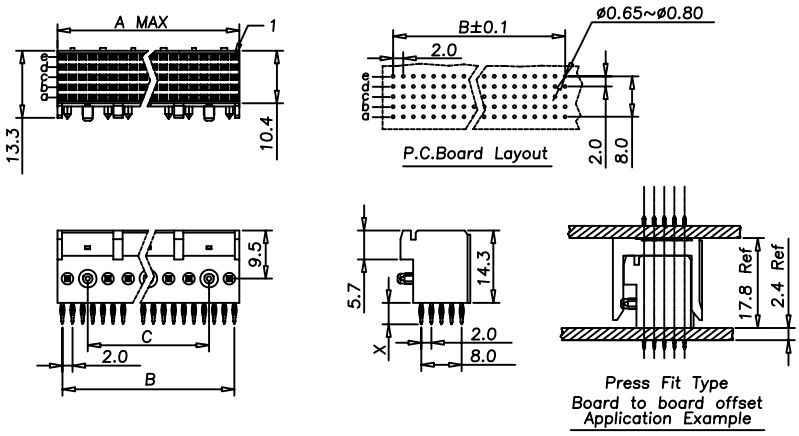




B±0.1

Position	Dimension		
	A	B	C
30	11.95	10.0	0
60	23.95	22.0	12.0
90	35.95	34.0	24.0
120	47.95	46.0	36.0
150	59.95	58.0	48.0
180	71.95	70.0	60.0
210	83.95	82.0	72.0
240	95.95	94.0	84.0
X Length	03		04
	3.45		4.25

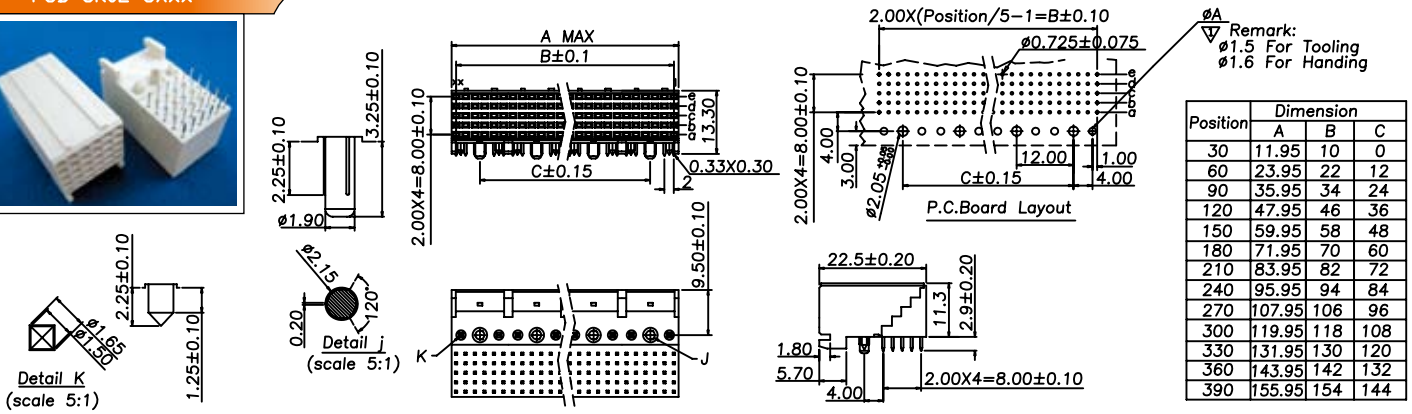
FUB-SPxx-5Xxx



B±0.1

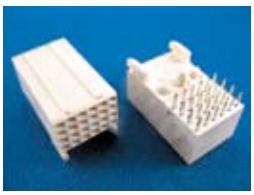
Position	Dimension		
	A	B	C
30	11.95	10.0	0
60	23.95	22.0	12.0
90	35.95	34.0	24.0
120	47.95	46.0	36.0
150	59.95	58.0	48.0
180	71.95	70.0	60.0
210	83.95	82.0	72.0
240	95.95	94.0	84.0
X Length	03		04
	3.45		4.25

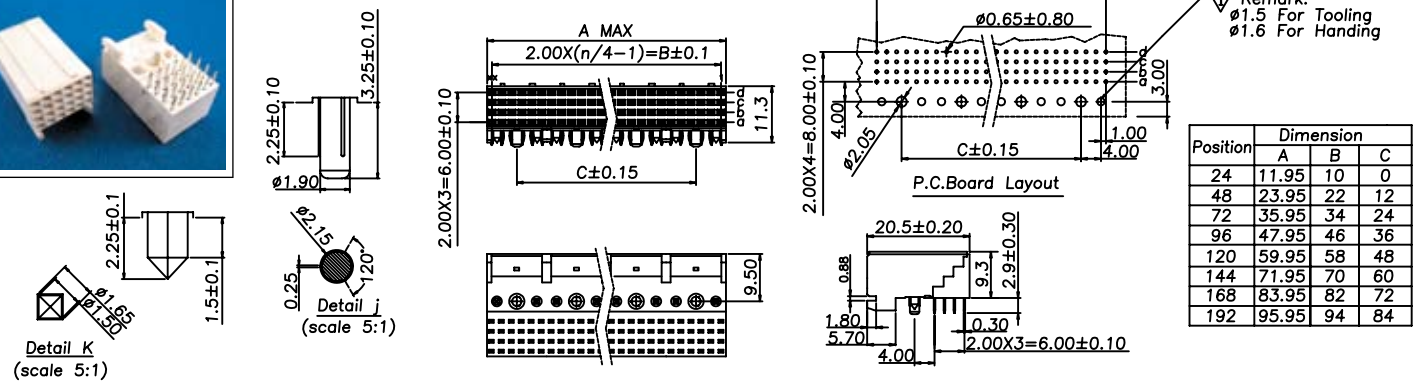
FUB-SR02-5Xxx



Position	Dimension		
	A	B	C
30	11.95	10	0
60	23.95	22	12
90	35.95	34	24
120	47.95	46	36
150	59.95	58	48
180	71.95	70	60
210	83.95	82	72
240	95.95	94	84
270	107.95	106	96
300	119.95	118	108
330	131.95	130	120
360	143.95	142	132
390	155.95	154	144

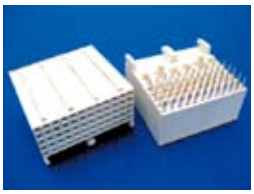
FUB-SQ02-4Xxx

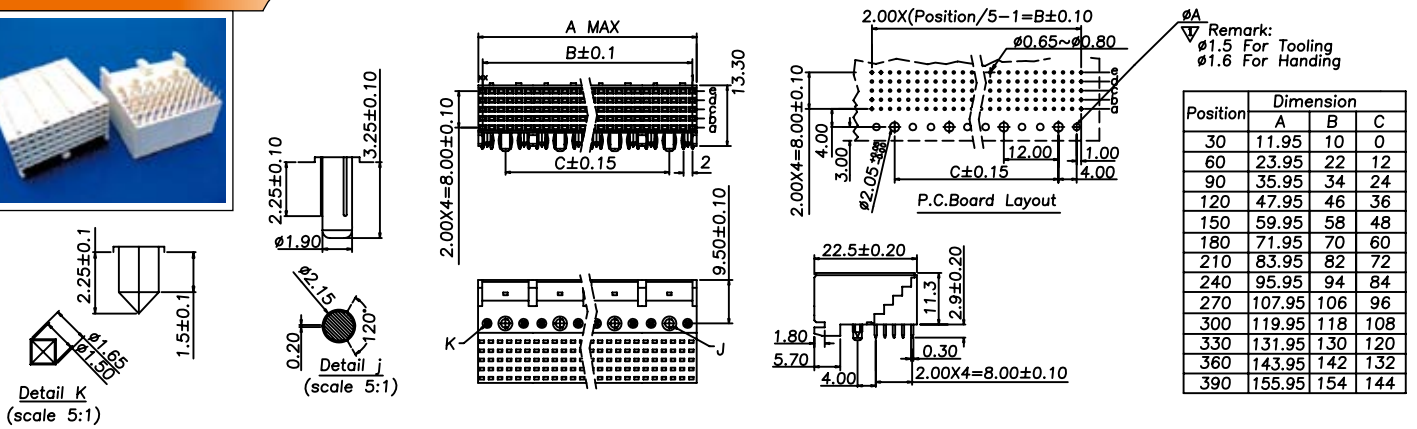




Position	Dimension		
	A	B	C
24	11.95	10	0
48	23.95	22	12
72	35.95	34	24
96	47.95	46	36
120	59.95	58	48
144	71.95	70	60
168	83.95	82	72
192	95.95	94	84

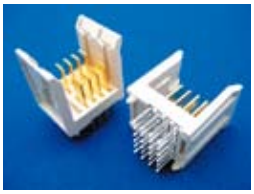
FUB-SQ02-5Xxx

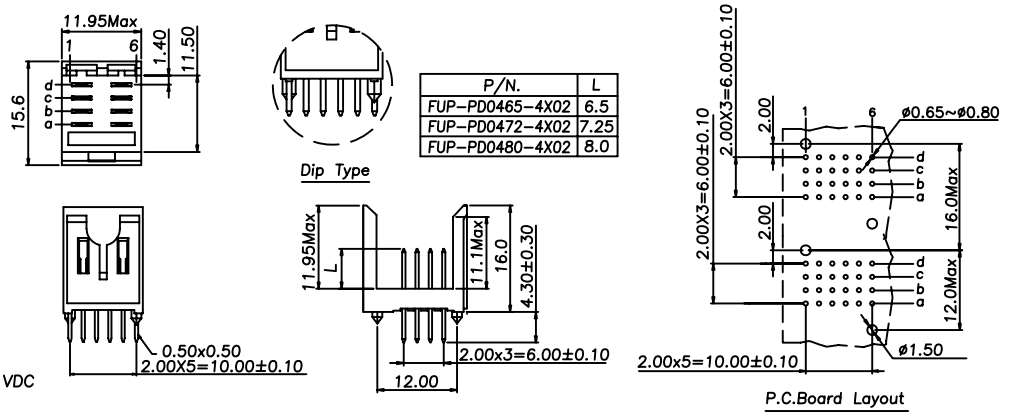




Position	Dimension		
	A	B	C
30	11.95	10	0
60	23.95	22	12
90	35.95	34	24
120	47.95	46	36
150	59.95	58	48
180	71.95	70	60
210	83.95	82	72
240	95.95	94	84
270	107.95	106	96
300	119.95	118	108
330	131.95	130	120
360	143.95	142	132
390	155.95	154	144

FUP-PD04xx-4X02

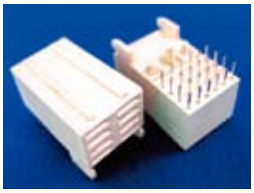


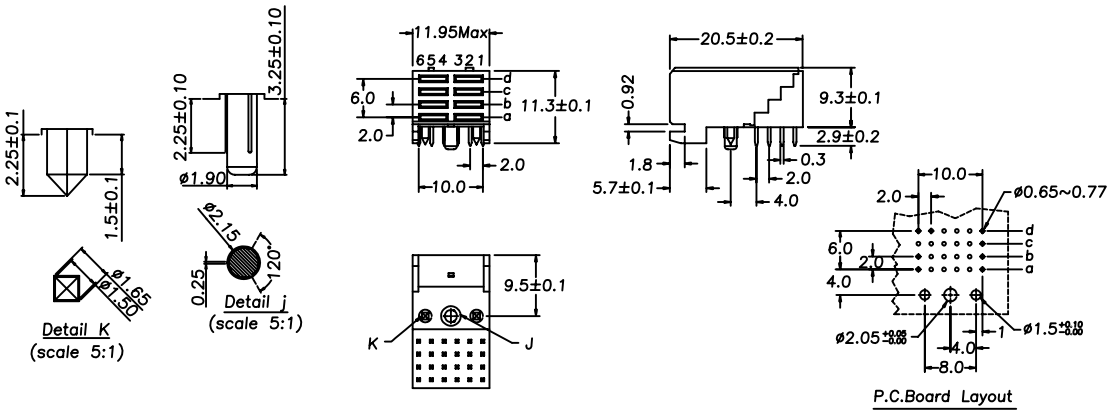


P/N.	L
FUP-PD0465-4X02	6.5
FUP-PD0472-4X02	7.25
FUP-PD0480-4X02	8.0

SPECIFICATION
MATERIAL
Housing: High Temperature Plastic UL94V-0
Contacts: Bronze
ELECTRICAL
Current rating: 3 Amps max.
Contact resistance: 30 mohms max.
Insulation resistance: 1000 Mohms min @ 500 VDC
Operating temperature: −65°C TO +125°C

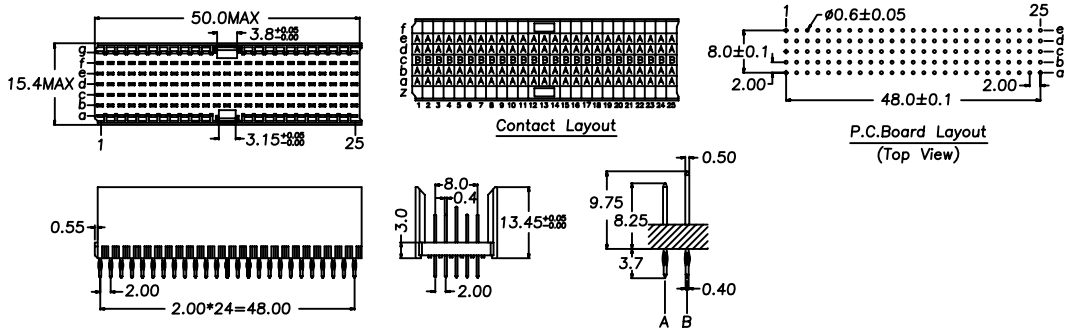
FUP-SR02-4X06



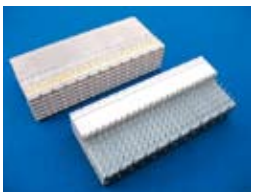


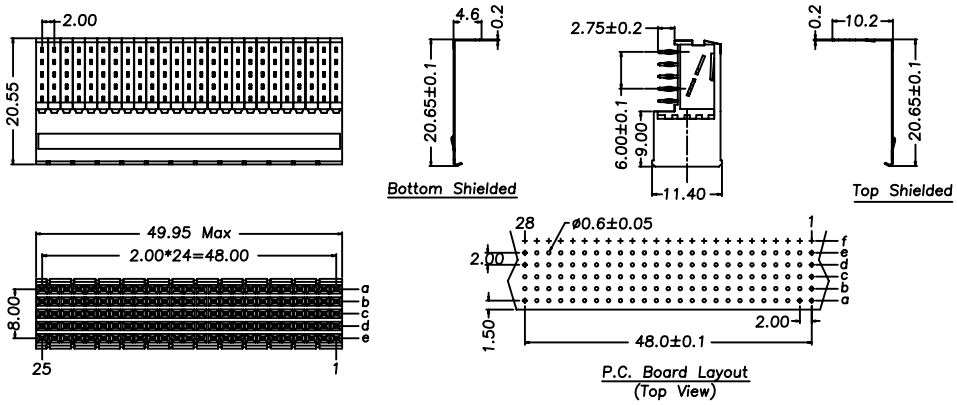
Hard Metric Connectors

HM7AB-PP03AB-125



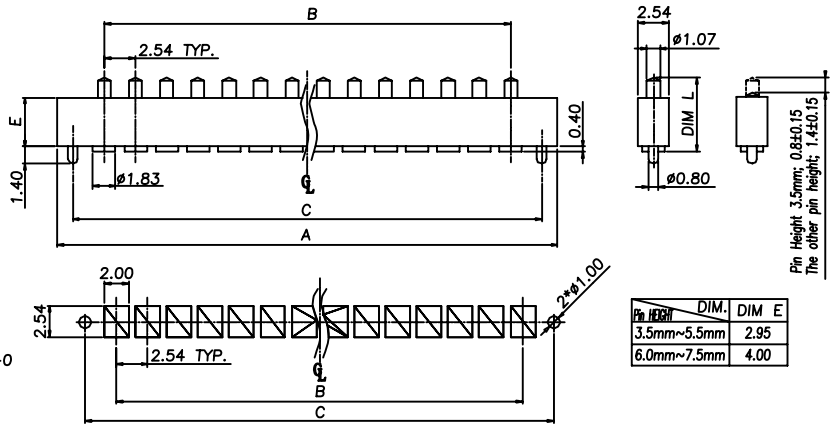
HM7B-SQ-125





Pogo pin Connectors

PGP26-VxxP-1Xxx



Pin HEIGHT \ DIM.	DIM E
3.5mm~5.5mm	2.95
6.0mm~7.5mm	4.00

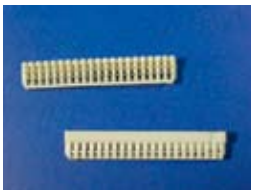
Pin No. \ DIM	DIM A	DIM B	DIM C
02	10.16	2.54	7.62
03	12.70	5.08	10.16
04	15.24	7.62	12.70
05	17.78	10.16	15.24
06	20.32	12.70	17.78
07	22.86	15.24	20.32
08	25.40	17.78	22.86
09	27.94	20.32	25.40
10	30.48	22.86	27.94
11	33.02	25.40	30.48
12	35.56	27.94	33.02
13	38.10	30.48	35.56
14	40.64	33.02	38.10
15	43.18	35.56	40.64
16	45.72	38.10	43.18

NOTES:
1.Material:
Housing:Thermoplastic,UL 94V-0
Terminal:Copper alloy
2.Finish:
Terminal:0.5um Au/2.5um Ni

Recommended P.C.B. Layout
Layout Tolerance=±0.05mm

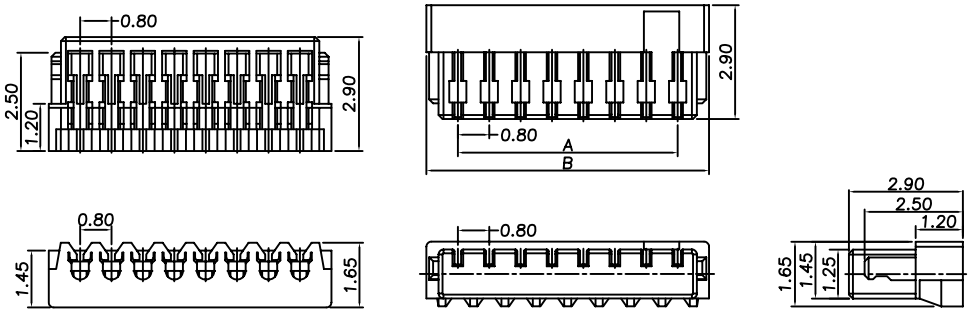
0.8mm Connectors

SUR-SI32-xx



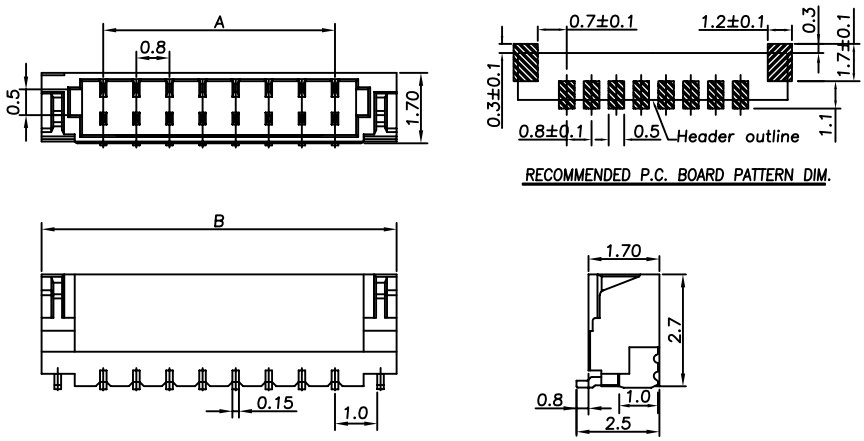
Specifications
Electrical
Voltage Rating: 30V(DC)
Current Rating: 0.5A AC,DC (AWG#32)
0.2A AC,DC (AWG#36)
Contact Resistance: Initial value/20mΩ max
After environmental testing/40mΩ max
Dielectric Withstanding Voltage: 200V AC/1minute
Insulation Resistance: 100MΩ min

Material
Circuits: 2~20;and 22
Insulator: Polyamide, UL 94V-0
Temperature Range: -25°C~+85°C (including temperature rise in applying electrical current)
Wafer:Polyamide,UL94V-0, natural
Contact:copper alloy, tin-plated
Solder tad:Brass, tin-plated



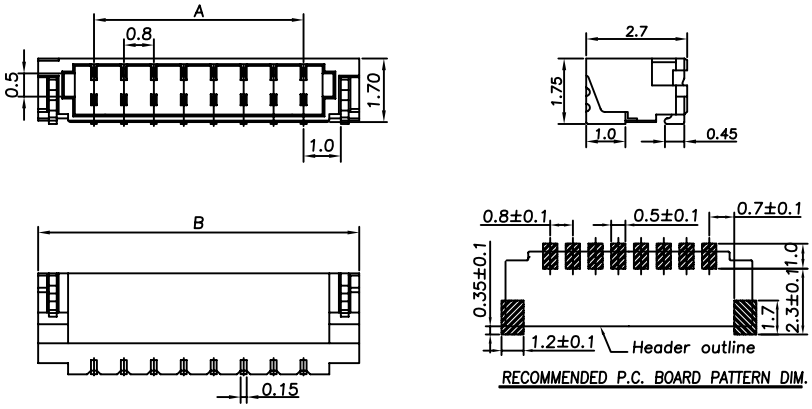
Poles	Dimension mm A	B
2	0.8	2.4
3	1.6	3.2
4	2.4	4.0
5	3.2	4.8
6	4.0	5.6
7	4.8	6.4
8	5.6	7.2
9	6.4	8.0
10	7.2	8.8
11	8.0	9.6
12	8.8	10.4
13	9.6	11.2
14	10.4	12.0
15	11.2	12.8
16	12.0	13.6
17	12.8	14.4
18	13.6	15.2
19	14.4	16.0
20	15.2	16.8
22	16.8	18.4

SUR-V-xx



Poles	Dimension mm A	B
2	0.8	3.8
3	1.6	4.6
4	2.4	5.4
5	3.2	6.2
6	4.0	7.0
7	4.8	7.8
8	5.6	8.6
9	6.4	9.4
10	7.2	10.2
11	8.0	11.0
12	8.8	11.8
13	9.6	12.6
14	10.4	13.4
15	11.2	14.2
16	12.0	15.0
17	12.8	15.8
18	13.6	16.6
19	14.4	17.4
20	15.2	18.2
22	16.8	19.8

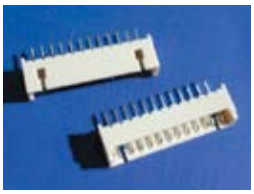
SUR-W-xx



Poles	Dimension mm A	B
2	0.8	3.8
3	1.6	4.6
4	2.4	5.4
5	3.2	6.2
6	4.0	7.0
7	4.8	7.8
8	5.6	8.6
9	6.4	9.4
10	7.2	10.2
11	8.0	11.0
12	8.8	11.8
13	9.6	12.6
14	10.4	13.4
15	11.2	14.2
16	12.0	15.0
17	12.8	15.8
18	13.6	16.6
19	14.4	17.4
20	15.2	18.2
22	16.8	19.8

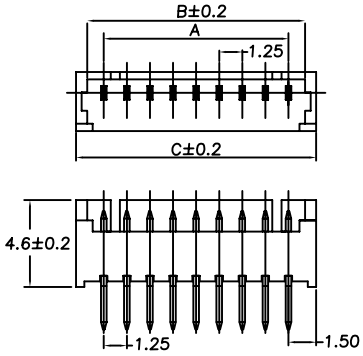
1.25mm Connectors

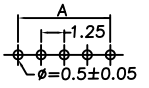
FH-D-xx



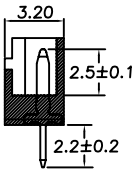
MATERIAL:
WAFER:HIGH TEMPERA TURE PLASTIC
NYLON46 UL94V-0
PIN:HIGH STRENGTH BRASS
WITH TIN OVER NICKEL PLATED

SPECIFICATION:
CURRENT RATE: 1 AMP
IUSULATION RESISTANCE: 500 M OHM MIN
CONTACT RESISTANCE: 20 M OHM MAX
DIELECTRIC VOLTAGE: 500 V AC FOR ONE MINUTE
OPERATION TEMPERATURE: −25°C ~ +85°C





P.C. Board Layout

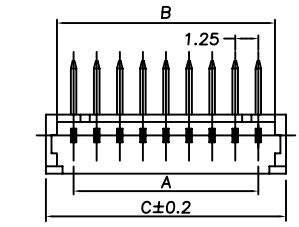


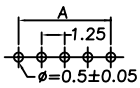
CKT.	A	B	C
2	1.25	3.15	4.25
3	2.50	4.40	5.50
4	3.75	5.65	6.75
5	5.00	6.90	8.00
6	6.25	8.15	9.25
7	7.50	9.40	10.50
8	8.75	10.65	11.75
9	10.00	11.90	13.00
10	11.25	13.15	14.25
11	12.50	14.40	15.50
12	13.75	15.65	16.75
13	15.00	16.90	18.00
14	16.25	18.15	19.25
15	17.50	19.40	20.50

FH-R-xx

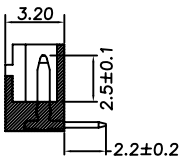
MATERIAL:
WAFER:HIGH TEMPERA TURE PLASTIC
NYLON46 UL94V-0
PIN:HIGH STRENGTH BRASS
WITH TIN OVER NICKEL PLATED

SPECIFICATION:
CURRENT RATE: 1 AMP
IUSULATION RESISTANCE: 500 M OHM MIN
CONTACT RESISTANCE: 20 M OHM MAX
DIELECTRIC VOLTAGE: 500 V AC FOR ONE MINUTE
OPERATION TEMPERATURE: −25°C ~ +85°C



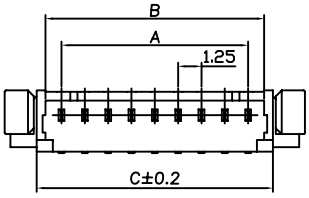


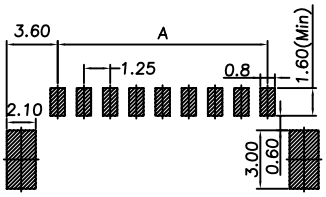
P.C. Board Layout



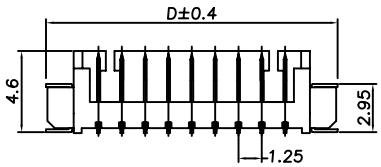
CKT.	A	B	C
2	1.25	3.15	4.25
3	2.50	4.40	5.50
4	3.75	5.65	6.75
5	5.00	6.90	8.00
6	6.25	8.15	9.25
7	7.50	9.40	10.50
8	8.75	10.65	11.75
9	10.00	11.90	13.00
10	11.25	13.15	14.25
11	12.50	14.40	15.50
12	13.75	15.65	16.75
13	15.00	16.90	18.00
14	16.25	18.15	19.25
15	17.50	19.40	20.50

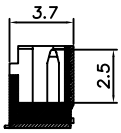
FH-V-xx





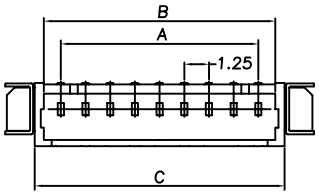
RECOMMENDED P.C. BOARD PATTERN DIM.

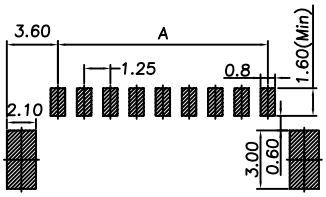




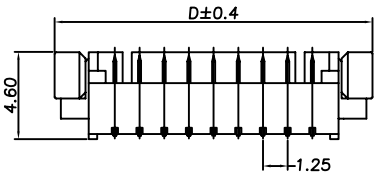
CKT.	A	B	C	D
2	1.25	3.05	4.25	7.65
3	2.50	4.30	5.50	8.90
4	3.75	5.55	6.75	10.15
5	5.00	6.80	8.00	11.40
6	6.25	8.05	9.25	12.65
7	7.50	9.30	10.50	13.90
8	8.75	10.55	11.75	15.15
9	10.00	11.80	13.00	16.40
10	11.25	13.05	14.25	17.65
11	12.50	14.30	15.50	18.90
12	13.75	15.55	16.75	20.15
13	15.00	16.80	18.00	21.40
14	16.25	18.05	19.25	22.65
15	17.50	19.30	20.50	23.90

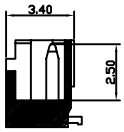
FH-W-xx





RECOMMENDED P.C. BOARD PATTERN DIM.

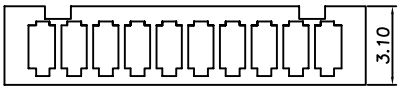


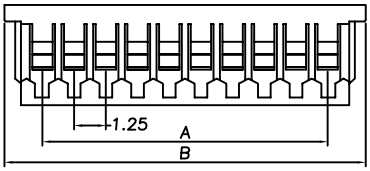


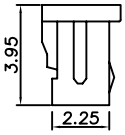
CKT.	A	B	C	D
2	1.25	3.05	4.25	7.65
3	2.50	4.30	5.50	8.90
4	3.75	5.55	6.75	10.15
5	5.00	6.80	8.00	11.40
6	6.25	8.05	9.25	12.65
7	7.50	9.30	10.50	13.90
8	8.75	10.55	11.75	15.15
9	10.00	11.80	13.00	16.40
10	11.25	13.05	14.25	17.65
11	12.50	14.30	15.50	18.90
12	13.75	15.55	16.75	20.15
13	15.00	16.80	18.00	21.40
14	16.25	18.05	19.25	22.65
15	17.50	19.30	20.50	23.90

FH-H-xx

MATERIAL:
WAFER:HIGH TEMPERA TURE PLASTIC
NYLON46 UL94V-0
PIN:HIGH STRENGTH BRASS
WITH TIN OVER NICKEL PLATED







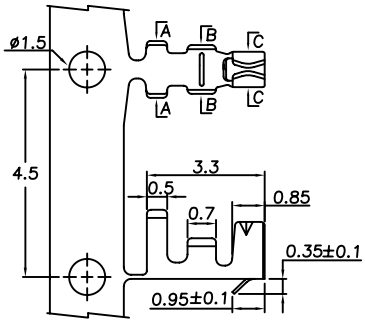
CKT.	A	B
2	1.25	4.25
3	2.50	5.50
4	3.75	6.75
5	5.00	8.00
6	6.25	9.25
7	7.50	10.50
8	8.75	11.75
9	10.00	13.00
10	11.25	14.25
11	12.50	15.50
12	13.75	16.75
13	15.00	18.00
14	16.25	19.25
15	17.50	20.50

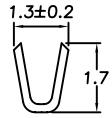
SPECIFICATION:
CURRENT RATE: 1 AMP
IUSULATION RESISTANCE: 500 M OHM MIN
CONTACT RESISTANCE: 20 M OHM MAX
DIELECTRIC VOLTAGE: 500 V AC FOR ONE MINUTE
OPERATION TEMPERATURE: −25°C ~ +85°C

FH-T-28

SPECIFICATIONS
Electrical
Current Rating: 1A AC, DC
Voltage Rating: 125V AC/ max.
Operating Temp.: −25°C ~ +85°C
Insulation Resistance: 100MOHM/ min.
Dielectric Withstanding Voltage: 250V AC/ min.
Contact Resistance: 20mohm/ max.

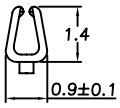
Material
Terminal maetrial: Phosphor Bronze/ Tin−plated
Wire Range: 28 to 32AWG





Section A−A

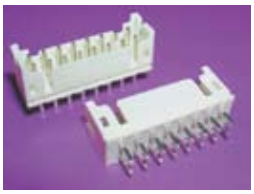
Section B−B



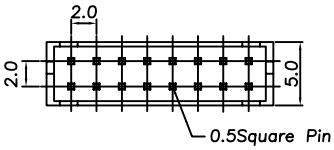
Section C−C

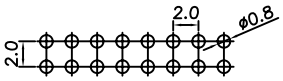
2.0mm Connectors

PHD-D-xx

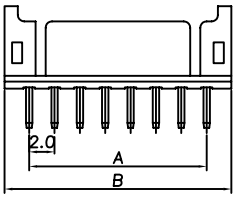


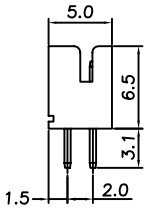
Specification
Current Rating: 3A AC DC
Voltage Rating: 250V AC, DC
Operating Temp: −25°C ~ +85°C
Contact Resistance: 20mohm Max
Insulation Resistance: 1000MOHM Min
Terminal Material: Brass/ Tin−plated/ Gold−plated
Material: Nylon 66, UL 94V−0





REMCOMMENDED P.C.BOARD HOLE DIMM.

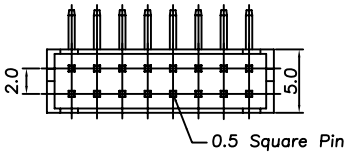


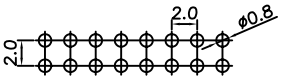


Poles	Dimension mm A	B
6	4.0	7.9
8	6.0	9.9
10	8.0	11.9
12	10.0	13.9
14	12.0	15.9
16	14.0	17.9
18	16.0	19.9
20	18.0	21.9
22	20.0	23.9
24	22.0	25.9
26	24.0	27.9
28	26.0	29.9
30	28.0	31.9
32	30.0	33.9

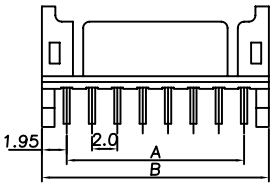
PHD-R-xx

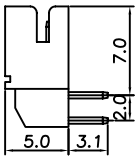
Specification
Current Rating: 3A AC DC
Voltage Rating: 250V AC, DC
Operating Temp: −25°C ~ +85°C
Contact Resistance: 20mohm Max
Insulation Resistance: 1000MOHM Min
Terminal Material: Brass/ Tin−plated/ Gold−plated
Material: Nylon 66, UL 94V−0





REMCOMMENDED P.C.BOARD HOLE DIMM.

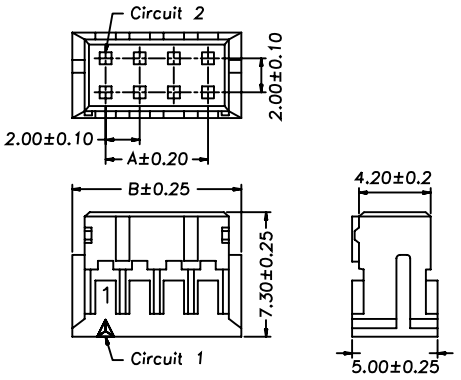




Poles	Dimension mm A	B
6	4.0	7.9
8	6.0	9.9
10	8.0	11.9
12	10.0	13.9
14	12.0	15.9
16	14.0	17.9
18	16.0	19.9
20	18.0	21.9
22	20.0	23.9
24	22.0	25.9
26	24.0	27.9
28	26.0	29.9
30	28.0	31.9
32	30.0	33.9

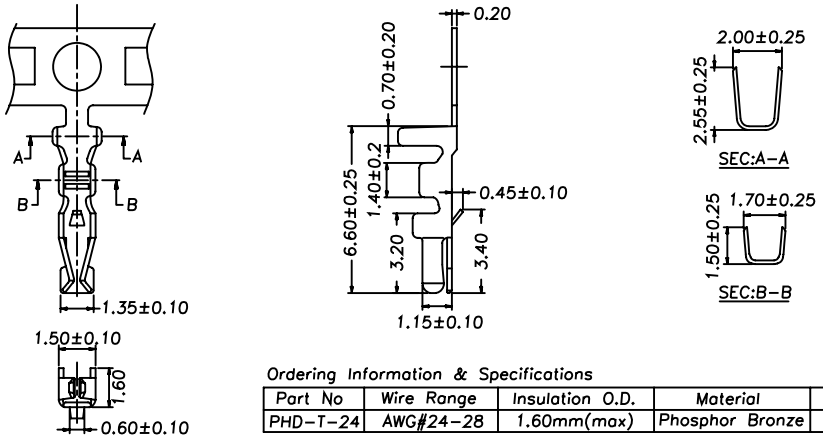
PHD-H-xx

Specification
Current Rating: 2A AC DC
Voltage Rating: 250V AC, DC
Operating Temp: −25°C ~ +85°C
Contact Resistance: 20mohm Max
Insulation Resistance: 1000MOHM Min
Withstanding Voltage: 800V AC/minute
Material: Nylon 66, UL 94V−0



Poles	Dimension mm A	B
6	4.0	7.9
8	6.0	9.9
10	8.0	11.9
12	10.0	13.9
14	12.0	15.9
16	14.0	17.9
18	16.0	19.9
20	18.0	21.9
22	20.0	23.9
24	22.0	25.9
26	24.0	27.9
28	26.0	29.9
30	28.0	31.9
32	30.0	33.9
34	32.0	35.9
36	34.0	37.9
38	36.0	39.9
40	38.0	41.9

PHD-T-24



Ordering Information & Specifications

Part No	Wire Range	Insulation O.D.	Material	Finish	Qty/reel
PHD−T−24	AWG#24−28	1.60mm(max)	Phosphor Bronze	Tin−plated	10,000pcs

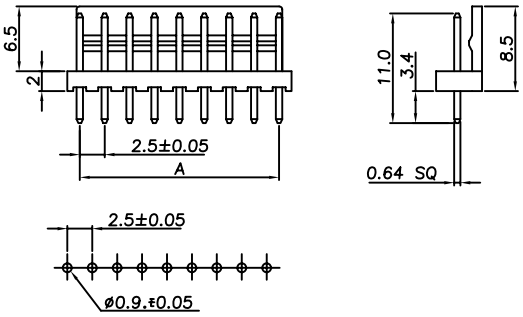
2.5mm Connectors

RM-D-xx

CIRCUITS	DIM.A	DIM.B			
2	2.50	5.00	11	25.00	27.50
3	5.00	7.50	12	27.50	30.00
4	7.50	10.00	13	30.00	32.50
5	10.00	12.50	14	32.50	35.00
6	12.50	15.00	15	35.00	37.50
7	15.00	17.50	16	37.50	40.00
8	17.50	20.00	17	40.00	42.50
9	20.00	22.50	18	42.50	45.00
10	22.50	25.00	19	45.00	47.50
			20	47.50	50.00

SPECIFICATION
CURRENT RATING: 3A AC,DC
VOLTAG RATING: 250V AC,DC
TEMPERATURE RANGE: −25°C TO +85°C
INSULATION RESISTANCE: 1,000M OHM MIN.
WITHSTANDING VOLTAGE: 1,000V AC/MINUTE
CONTACT: PHOSPHOR COPER,TIN−PLATED OR BRASS

APPLICABLE WIRE:AWG #28 TO #22
WAFER: NYLON 66,UL94V−0



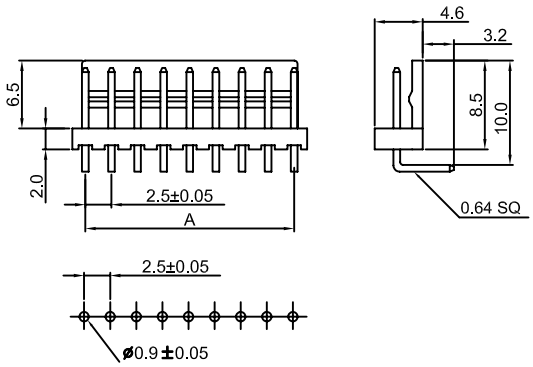
P.C.B. LAYOUT

RM-R-xx

CIRCUITS	DIM.A	DIM.B			
2	2.50	5.00	11	25.00	27.50
3	5.00	7.50	12	27.50	30.00
4	7.50	10.00	13	30.00	32.50
5	10.00	12.50	14	32.50	35.00
6	12.50	15.00	15	35.00	37.50
7	15.00	17.50	16	37.50	40.00
8	17.50	20.00	17	40.00	42.50
9	20.00	22.50	18	42.50	45.00
10	22.50	25.00	19	45.00	47.50
			20	47.50	50.00

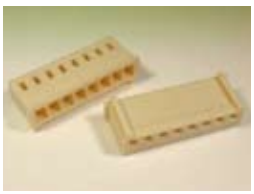
SPECIFICATION
CURRENT RATING: 3A AC,DC
VOLTAG RATING: 250V AC,DC
TEMPERATURE RANGE: −25°C TO +85°C
INSULATION RESISTANCE: 1,000M OHM MIN.
WITHSTANDING VOLTAGE: 1,000V AC/MINUTE
CONTACT: PHOSPHOR COPER,TIN−PLATED OR BRASS

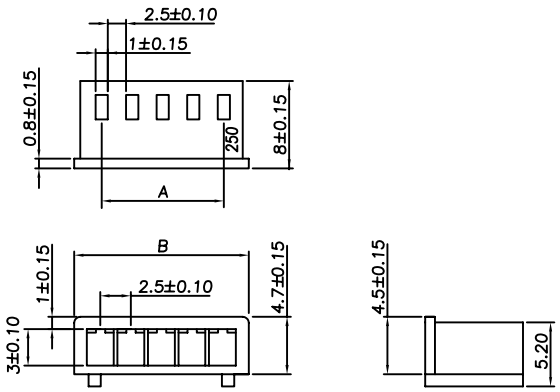
APPLICABLE WIRE:AWG #28 TO #22
WAFER: NYLON 66,UL94V−0



P.C.B. LAYOUT

RM-H-xx

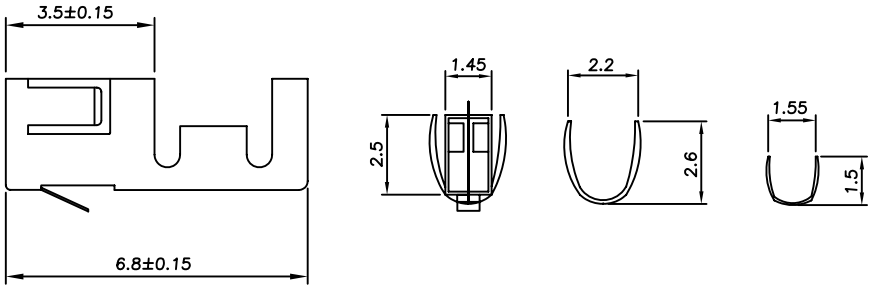




SPECIFICATION
CURRENT RATING: 3A AC,DC
VOLTAG RATING: 250V AC,DC
TEMPERATURE RANGE: −25°C TO +85°C
INSULATION RESISTANCE: 1,000M OHM MIN.
WITHSTANDING VOLTAGE: 1,000V AC/MINUTE
CONTACT: PHOSPHOR COPER,TIN−PLATED OR BRASS
APPLICABLE WIRE:AWG #28 TO #22
HOUSING: NYLON 66,UL94V−0

CIRCUITS	DIM.A	DIM.B
2	2.50	6.74
3	5.00	9.24
4	7.50	11.74
5	10.00	14.24
6	12.50	16.74
7	15.00	19.24
8	17.50	21.74
9	20.00	24.24
10	22.50	26.74
11	25.00	29.24
12	27.50	31.74
13	30.00	34.24
14	32.50	36.74
15	35.00	39.24

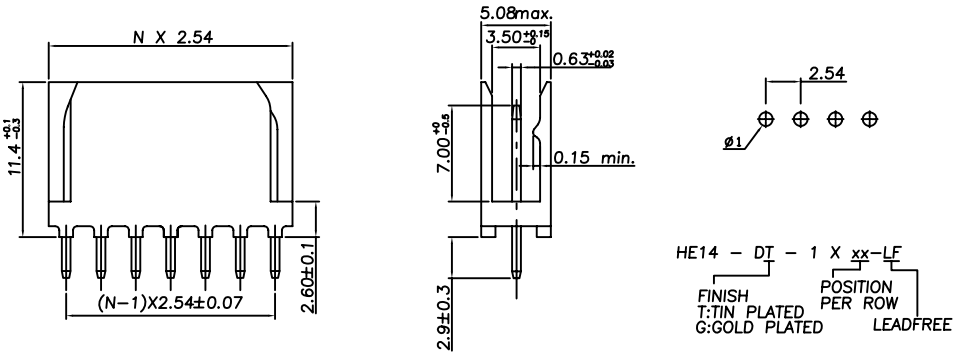
RM-T-22



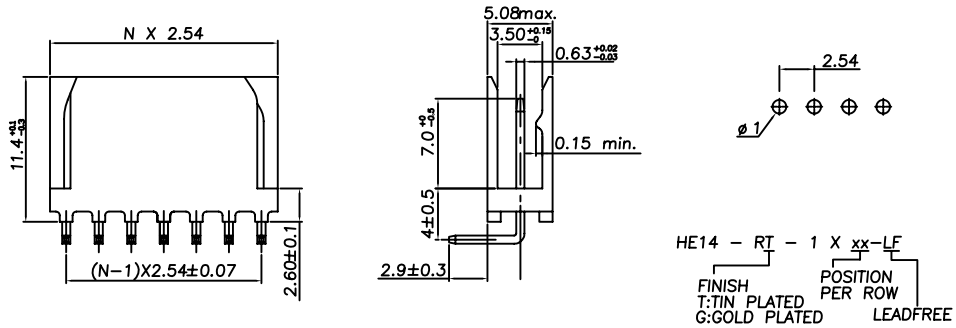
SPECIFICATION
CURRENT RATING: 3A AC,DC
VOLTAG RATING: 250V AC,DC
TEMPERATURE RANGE: −25°C TO +85°C
INSULATION RESISTANCE: 1,000M OHM MIN.
WITHSTANDING VOLTAGE: 1,000V AC/MINUTE
CONTACT: PHOSPHOR COPER,TIN−PLATED OR BRASS
APPLICABLE WIRE:AWG #28 TO #22

2.54mm Connectors

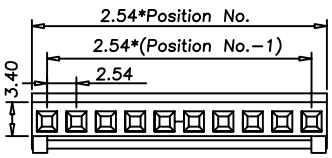
HE14-DG-1Xxx

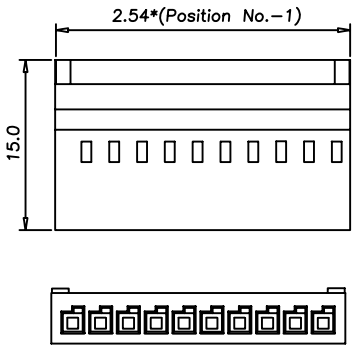


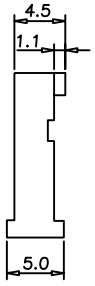
HE14-RT-1Xxx



HE14-H-1Xxx

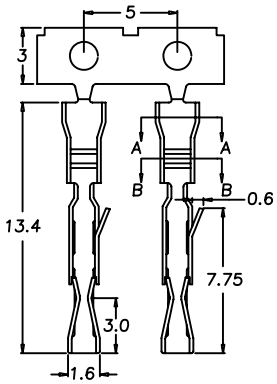


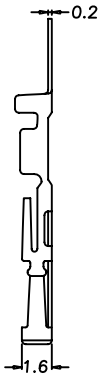


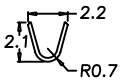


SPECIFICATION
MATERIAL
Insulator:PBT,glass reinforced,rated UL 94V−0

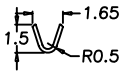
HE14-TG-24







A−A

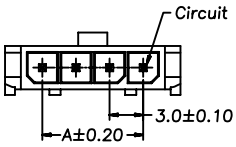


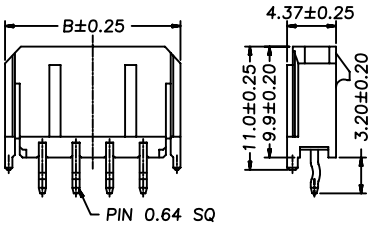
B−B

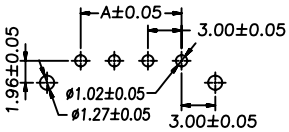
SPECIFICATION
MATERIAL
Contact:phosphor Bronze
Wire Range:AWG#24−28
Insulation O.D. :0.8−1.5mm
Plating:TIN plated or Gold Plated

3.00mm Connectors

MIF-PDP-1Xxx







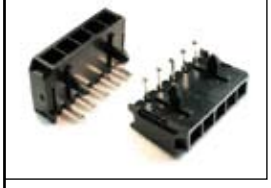
P.C.B Layout

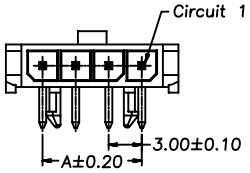
SPECIFICATION
CURRENT RATING: 5A AC,DC
VOLTAG RATING: 250V AC,DC
TEMPERATURE RANGE: −25°C TO +85°C
INSULATION RESISTANCE: 1,000M OHM MIN.
WITHSTANDING VOLTAGE: 1,500V AC/MINUTE
CONTACT RESISTANCE: 10m ohm Max
PIN MATERIAL: BRASS/TIN−PLATED
MATERIAL:PBT 30%GF,UL94V−0

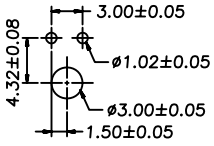
Ordering Information & Dimensions

PART NO.	Dimensions	
	A	B
MIF−PDP−1X02	3.00	9.65
MIF−PDP−1X03	6.00	12.65
MIF−PDP−1X04	9.00	15.65
MIF−PDP−1X05	12.00	18.65
MIF−PDP−1X06	15.00	21.65
MIF−PDP−1X07	18.00	24.65
MIF−PDP−1X08	21.00	27.65
MIF−PDP−1X09	24.00	30.65
MIF−PDP−1X10	27.00	33.65
MIF−PDP−1X11	30.00	36.65
MIF−PDP−1X12	33.00	39.65

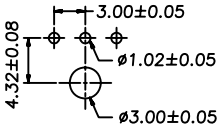
MIF-PRP-1Xxx



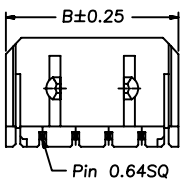


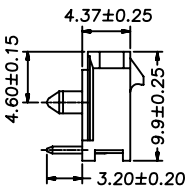


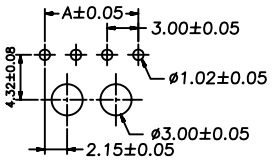
2P



3P







4~12P

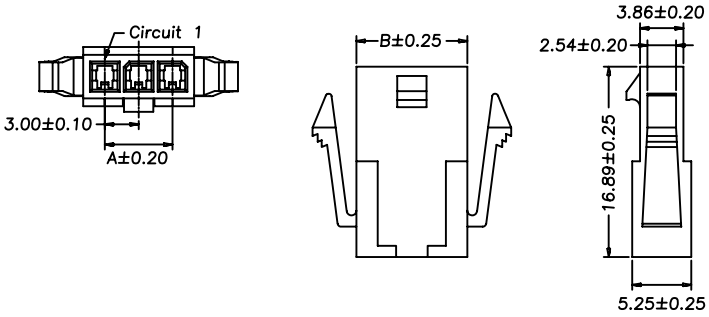
P.C.B LAYOUT

Ordering Information & Dimensions

PART NO.	Dimensions	
	A	B
MIF−PRP−1X02	3.00	9.65
MIF−PRP−1X03	6.00	12.65
MIF−PRP−1X04	9.00	15.65
MIF−PRP−1X05	12.00	18.65
MIF−PRP−1X06	15.00	21.65
MIF−PRP−1X07	18.00	24.65
MIF−PRP−1X08	21.00	27.65
MIF−PRP−1X09	24.00	30.65
MIF−PRP−1X10	27.00	33.65
MIF−PRP−1X11	30.00	36.65
MIF−PRP−1X12	33.00	39.65

Discrete wire connectors
單 線 類 連 接 器

MIF-PH-1Xxx

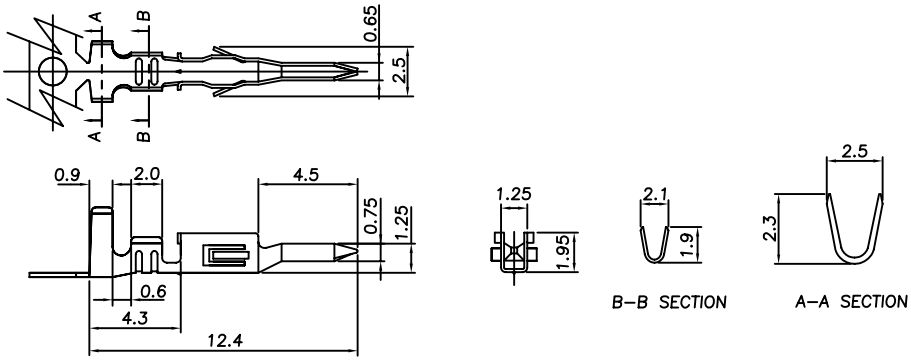


SPECIFICATION
CURRENT RATING: 5A AC,DC
VOLTAG RATING: 250V AC,DC
TEMPERATURE RANGE: −25°C TO +85°C
INSULATION RESISTANCE: 1,000M OHM MIN.
WITHSTANDING VOLTAGE: 1,500V AC/MINUTE
CONTACT RESISTANCE: 10m ohm Max
MATERIAL:Nylon 66,UL94V−2

Ordering Information & Dimensions

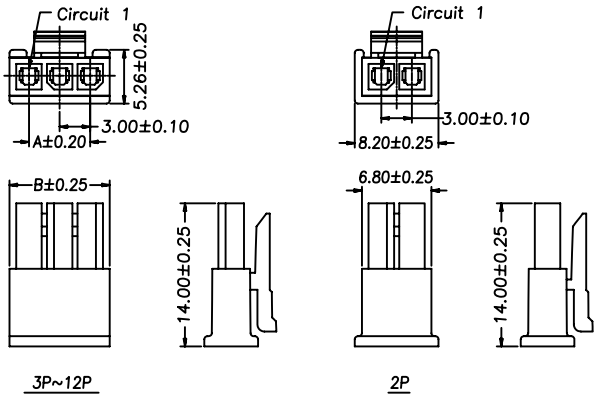
PART NO.	Dimensions	
	A	B
MIF-PH-1X02	3.00	6.85
MIF-PH-1X03	6.00	9.85
MIF-PH-1X04	9.00	12.85
MIF-PH-1X05	12.00	15.85
MIF-PH-1X06	15.00	18.85
MIF-PH-1X07	18.00	21.85
MIF-PH-1X08	21.00	24.85
MIF-PH-1X09	24.00	27.85
MIF-PH-1X10	27.00	30.85
MIF-PH-1X11	30.00	33.85
MIF-PH-1X12	33.00	36.85

MIF-MT-20



SPECIFICATION
Material:phosphor Bronze
Finished:Tin−plated 60u
Thickness:0.20mm
Wire Range:AWG#20−26
Q,TY:5,000PCS/Reel

MIF-SH-1Xxx

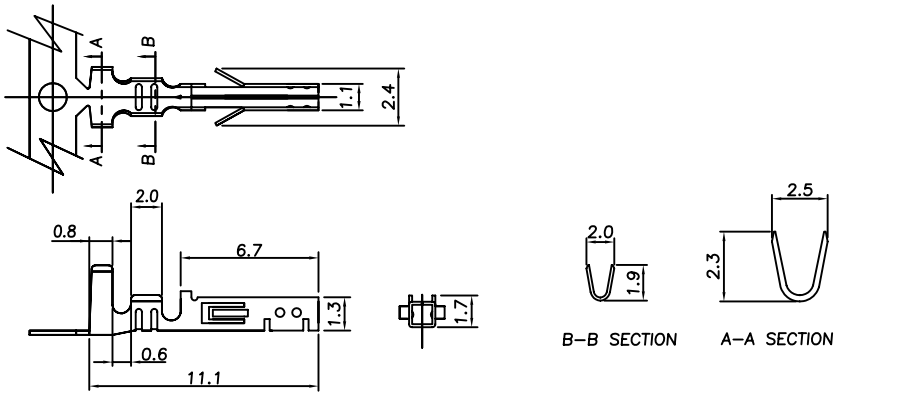


SPECIFICATION
CURRENT RATING: 5A AC,DC
VOLTAG RATING: 250V AC,DC
TEMPERATURE RANGE: −25°C TO +85°C
INSULATION RESISTANCE: 1,000M OHM MIN.
WITHSTANDING VOLTAGE: 1,500V AC/MINUTE
CONTACT RESISTANCE: 10m ohm Max
MATERIAL:Nylon 66,UL94V−2

Ordering Information & Dimensions

PART NO.	Dimensions	
	A	B
MIF-SH-1X02	3.00	6.80
MIF-SH-1X03	6.00	9.80
MIF-SH-1X04	9.00	12.80
MIF-SH-1X05	12.00	15.80
MIF-SH-1X06	15.00	18.80
MIF-SH-1X07	18.00	21.80
MIF-SH-1X08	21.00	24.80
MIF-SH-1X09	24.00	27.80
MIF-SH-1X10	27.00	30.80
MIF-SH-1X11	30.00	33.80
MIF-SH-1X12	33.00	36.80

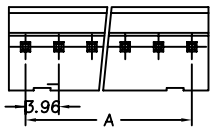
MIF-FT-20

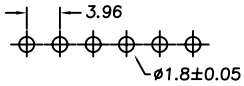


SPECIFICATION
Material:phosphor Bronze
Finished:Tin−plated 60u
Thickness:0.20mm
Wire Range:AWG#20−26
Q,TY:10,000PCS/Reel

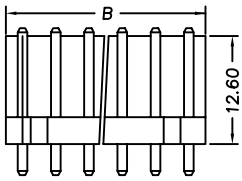
3.96mm Connectors

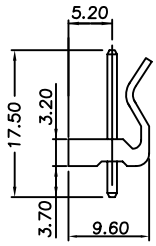
KK-D-xx





REMCOMMENDED P.C.BOARD HOLE DIMM.

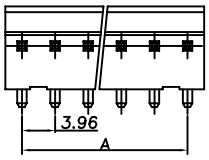


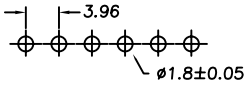


SPECIFICATIONS
Current Rating: 5A AC, DC
Voltage Rating: 250V AC, DC
Operating Temp.: −25°C ~ +85°C
Insulation Resistance: 1000MOHM/ min.
Dielectric Withstanding Voltage: 1500V AC/ min.
Contact Resistance: 10mohm/ max.
Material
Material: Nylon66, UL94V−2

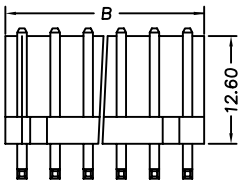
Poles	Dimension A	Dimension B	Part No.
2	3.96	7.92	KK−D−02
3	7.92	11.88	KK−D−03
4	11.88	15.84	KK−D−04
5	15.84	19.80	KK−D−05
6	19.80	23.76	KK−D−06
7	23.76	27.72	KK−D−07
8	27.72	31.68	KK−D−08
9	31.86	35.64	KK−D−09
10	35.64	39.60	KK−D−10
11	39.60	43.56	KK−D−11
12	43.56	47.52	KK−D−12
13	47.52	51.48	KK−D−13
14	51.48	55.44	KK−D−14
15	55.44	59.40	KK−D−15
16	59.40	63.36	KK−D−16
17	63.36	67.32	KK−D−17
18	67.32	71.28	KK−D−18
20	75.24	79.20	KK−D−20

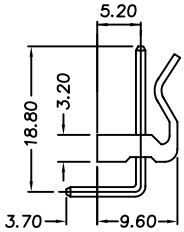
KK-R-xx





RECOMMENDED P.C.BOARD HOLE DIMM.

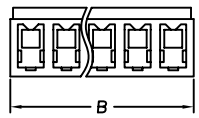


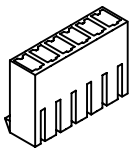


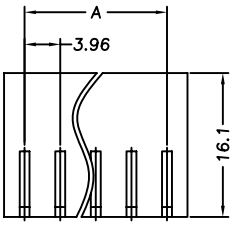
SPECIFICATIONS
Current Rating: 5A AC, DC
Voltage Rating: 250V AC, DC
Operating Temp.: −25°C ~ +85°C
Insulation Resistance: 1000MOHM/ min.
Dielectric Withstanding Voltage: 1500V AC/ min.
Contact Resistance: 10mohm/ max.
Material
Material: Nylon66, UL94V−2

Poles	Dimension A	Dimension B	Part No.
2	3.96	8.00	KK−R−02
3	7.92	12.00	KK−R−03
4	11.88	15.90	KK−R−04
5	15.84	20.00	KK−R−05
6	19.80	24.00	KK−R−06
7	23.76	27.90	KK−R−07
8	27.72	31.90	KK−R−08
9	31.86	35.80	KK−R−09
10	35.64	39.90	KK−R−10
11	39.60	47.80	KK−R−11
12	43.56	51.80	KK−R−12
13	47.52	55.70	KK−R−13
14	51.48	59.80	KK−R−14
15	55.44	63.80	KK−R−15
16	59.40	67.70	KK−R−16
17	63.36	71.70	KK−R−17
18	67.32	75.60	KK−R−18
20	75.24	79.80	KK−R−20

KK-H-xx



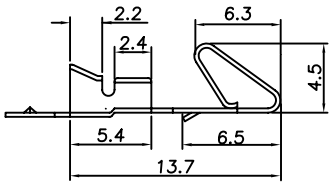


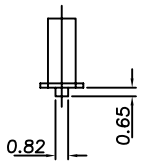


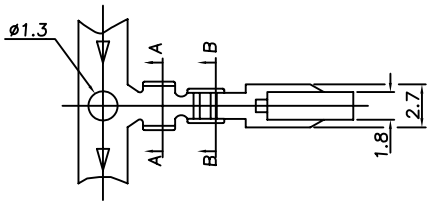
MATERIAL:NYLON 66.UL94V−2
CURRENT RATING:7A
VOLTAGE RATING:250V/AC

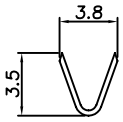
Poles	Dimension A	Dimension B	Part No.
2	3.96	8.62	KK−H−02
3	7.92	12.58	KK−H−03
4	11.88	16.54	KK−H−04
5	15.84	20.50	KK−H−05
6	19.80	24.46	KK−H−06
7	23.76	28.42	KK−H−07
8	27.72	32.38	KK−H−08
9	31.86	36.34	KK−H−09
10	35.64	40.30	KK−H−10
11	39.60	44.26	KK−H−11
12	43.56	48.22	KK−H−12
13	47.52	52.18	KK−H−13
14	51.48	56.14	KK−H−14
15	55.44	60.10	KK−H−15
16	59.40	64.06	KK−H−16
17	63.36	68.02	KK−H−17
18	67.32	71.98	KK−H−18
20	75.24	79.90	KK−H−20

KK-T-18

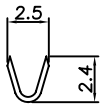








A−A SECTION

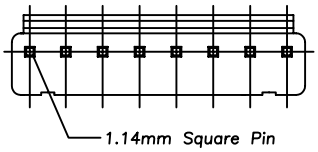


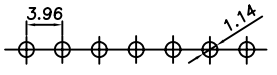
B−B SECTION

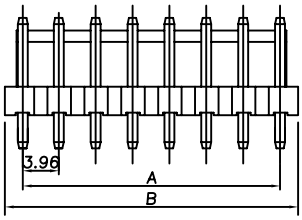
TERMINAL
Material: Brass
Thickness: 0.25mm
Plating: Tin plated 60u"
Wire Range: Suitable for AWG#18~26
Insulation O.D: 2.5mm (max)
Q'TY: 6,000 pcs/roll

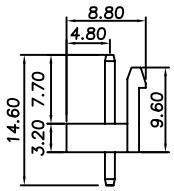
Discrete wire connectors
單 線 類 連 接 器

VH-D-xx





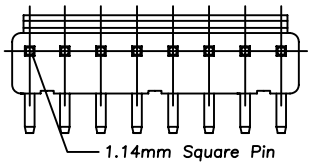


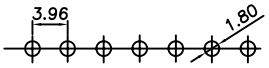


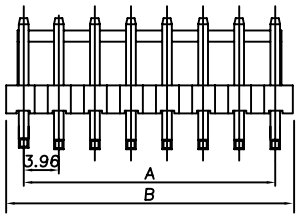
Specifications
Current Rating: 7A AC, DC
Voltage Rating: 250V AC Maximum
Operating Temp: −25°C ~ +85°C
Contact Resistance: 10M OHM Max
Insulation Resistance: 1000M OHM Min
Terminal Material: Brass/Tin−plated
Material: Nylon 66, UL94V−0

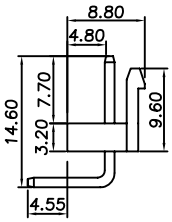
Poles	Dimension mm A	Dimension mm B	Part No.
2	3.96	7.92	VH−D−02
3	7.92	11.92	VH−D−03
4	11.88	15.84	VH−D−04
5	15.84	19.84	VH−D−05
6	19.80	23.80	VH−D−06
7	23.76	27.88	VH−D−07
8	27.72	31.74	VH−D−08
9	31.68	35.86	VH−D−09
10	35.64	39.90	VH−D−10
11	39.60	43.84	VH−D−11
12	43.56	47.92	VH−D−12
13	47.52	51.72	VH−D−13
14	51.48	55.92	VH−D−14

VH-R-xx





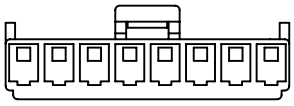


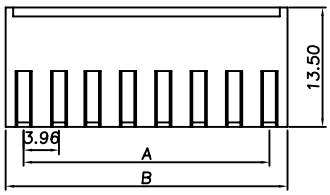


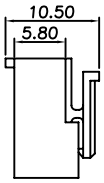
Specifications
Current Rating: 7A AC, DC
Voltage Rating: 250V AC Maximum
Operating Temp: −25°C~+85°C
Contact Resistance: 20M OHM Max
Insulation Resistance: 1000M OHM Min
Dielectric Withstanding Voltage: 1500V AC,DC Min
Terminal Material: Brass/Tin−plated
Material: Nylon 66, UL94V−0

Poles	Dimension mm A	Dimension mm B	Part No.
2	3.96	7.92	VH−R−02
3	7.92	11.92	VH−R−03
4	11.88	15.84	VH−R−04
5	15.84	19.84	VH−R−05
6	19.80	23.80	VH−R−06
7	23.76	27.88	VH−R−07
8	27.72	31.74	VH−R−08
9	31.68	35.86	VH−R−09
10	35.64	39.90	VH−R−10
11	39.60	43.84	VH−R−11
12	43.56	47.92	VH−R−12
13	47.52	51.72	VH−R−13
14	51.48	55.92	VH−R−14

VH-H-xx



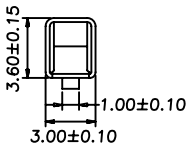


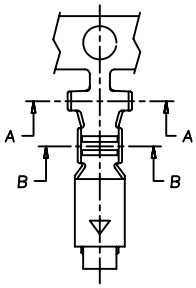


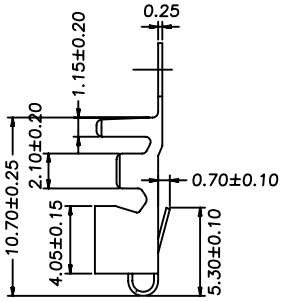
Specifications
Material: Nylon 66, UL94V−0

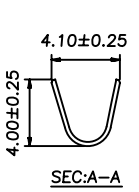
Poles	Dimension mm A	Dimension mm B	Part No.
2	3.96	8.04	VH−H−02
3	7.92	12.10	VH−H−03
4	11.88	15.96	VH−H−04
5	15.84	20.00	VH−H−05
6	19.80	23.90	VH−H−06
7	23.76	27.90	VH−H−07
8	27.72	31.92	VH−H−08
9	31.68	35.88	VH−H−09
10	35.64	39.84	VH−H−10
11	39.60	43.74	VH−H−11
12	43.56	47.74	VH−H−12
13	47.52	51.70	VH−H−13
14	51.48	55.66	VH−H−14

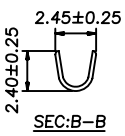
VH-T-18









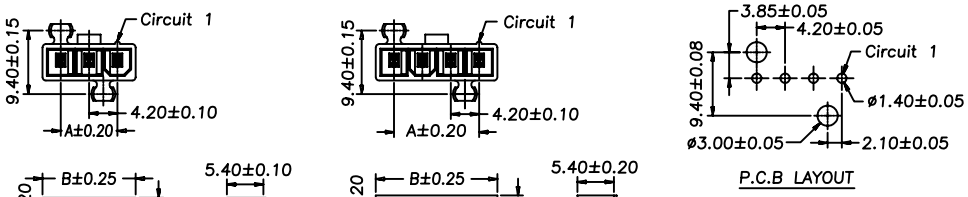


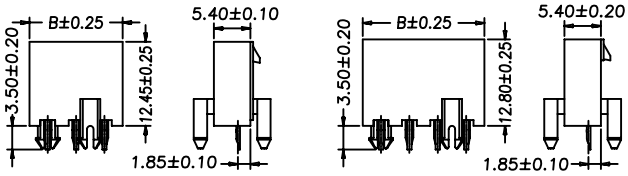
Ordering Information & Specifications

Part No.	Wire Range	Insulation O.D.	Material	Finish	Qty/reel
VH−T−18	AWG#18−22	2.80mm(max)	Brass	Tin−plated	4,000pcs

4.20mm Connectors

MF-PDP-1Xxx



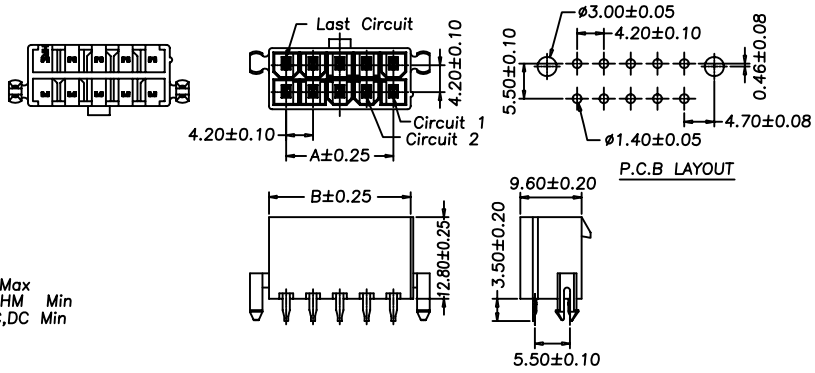


Specifications
Current Rating: 7A AC, DC
Voltage Rating: 250V AC,DC
Operating Temp: −25°C~+85°C
Contact Resistance: 10M OHM Max
Insulation Resistance: 1000M OHM Min
Withstanding Voltage: 1500V AC,DC Min
Pin Material: Brass/Tin−plated
Material: Nylon 66, UL94V−2

Ordering Information & Dimensions

PART No.	Dimensions	
	A	B
MF−PDP−1X03	8.40	13.80
MF−PDP−1X04	12.60	18.00
MF−PDP−1X05	16.80	22.20

MF-PDP-2Xxx

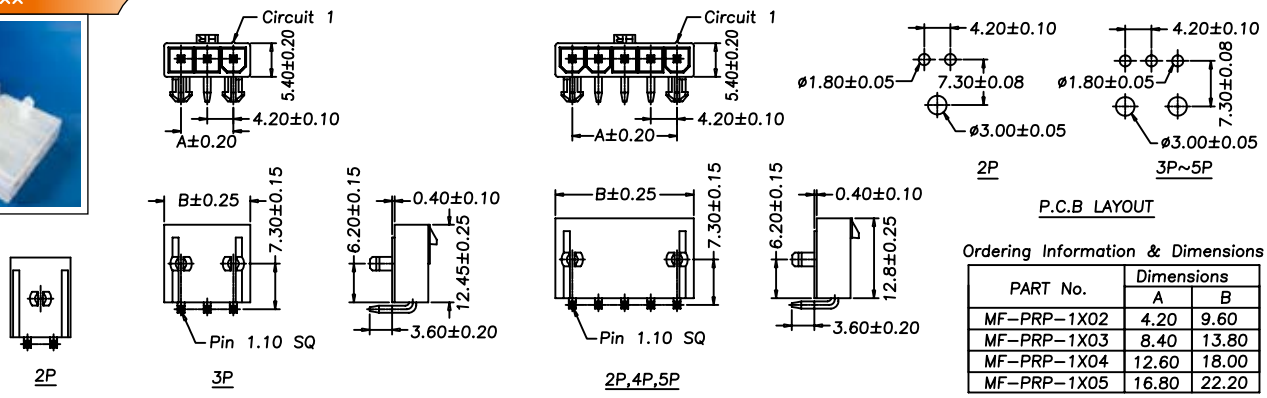


Specifications
Current Rating: 7A AC, DC
Voltage Rating: 250V AC,DC
Operating Temp: −25°C~+85°C
Contact Resistance: 10M OHM Max
Insulation Resistance: 1000M OHM Min
Withstanding Voltage: 1500V AC,DC Min
Pin Material: Brass/Tin−plated
Material: Nylon 66, UL94V−2

Ordering Information & Dimensions

PART No.	Dimensions	
	A	B
MF−PDP−2X01	−−−	5.40
MF−PDP−2X02	4.20	9.60
MF−PDP−2X03	8.40	13.80
MF−PDP−2X04	12.60	18.00
MF−PDP−2X05	16.80	22.20
MF−PDP−2X06	21.00	26.40
MF−PDP−2X07	25.20	30.60
MF−PDP−2X08	29.40	34.80
MF−PDP−2X09	33.60	39.00
MF−PDP−2X10	37.80	43.20
MF−PDP−2X11	42.00	47.40
MF−PDP−2X12	46.20	51.60

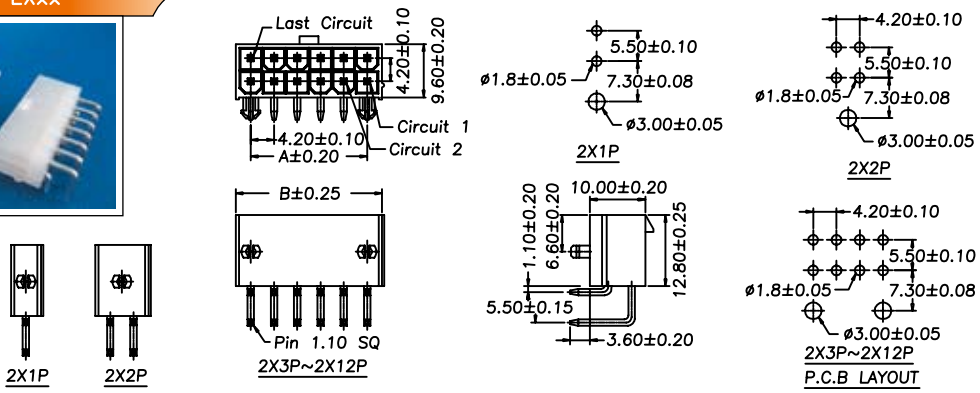
MF-PRP-1Xxx



Ordering Information & Dimensions

PART No.	Dimensions	
	A	B
MF−PRP−1X02	4.20	9.60
MF−PRP−1X03	8.40	13.80
MF−PRP−1X04	12.60	18.00
MF−PRP−1X05	16.80	22.20

MF-PRP-2Xxx



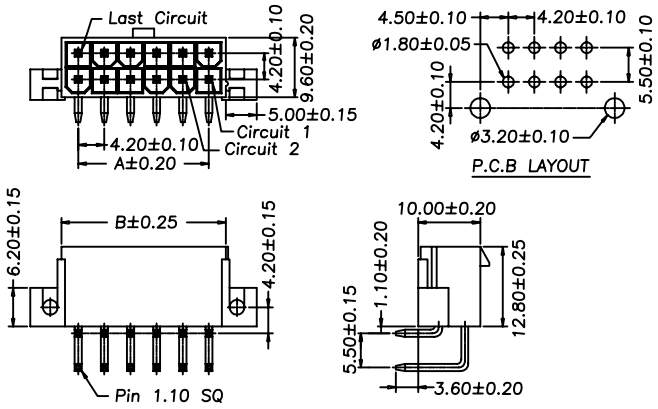
Ordering Information & Dimensions

PART No.	Dimensions	
	A	B
MF−PRP−2X01	−−−	5.40
MF−PRP−2X02	4.20	9.60
MF−PRP−2X03	8.40	13.80
MF−PRP−2X04	12.60	18.00
MF−PRP−2X05	16.80	22.20
MF−PRP−2X06	21.00	26.40
MF−PRP−2X07	25.20	30.60
MF−PRP−2X08	29.40	34.80
MF−PRP−2X09	33.60	39.00
MF−PRP−2X10	37.80	43.20
MF−PRP−2X11	42.00	47.40
MF−PRP−2X12	46.20	51.60

Pin 1.10 SQ

MF-PRE-2Xxx

Specifications
Current Rating: 9A AC, DC
Voltage Rating: 600V AC,DC
Operating Temp: −25°C~+85°C
Contact Resistance: 10M OHM Max
Insulation Resistance: 1000M OHM Min
Withstanding Voltage: 1500V AC,DC Min
Material: Nylon 66, UL94V−2
Color:Natural(Translucent)

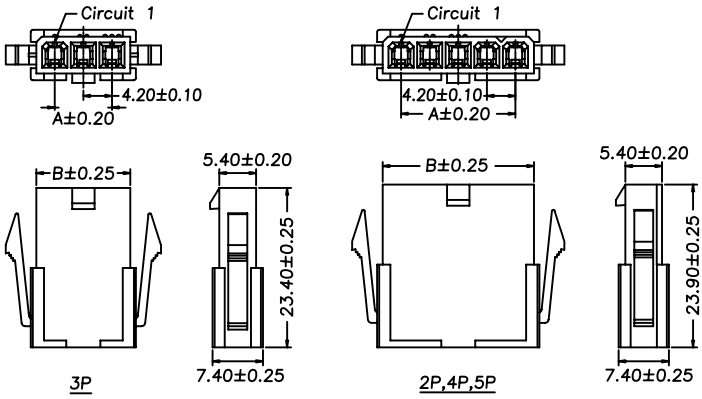


Ordering Information & Dimensions

PART No.	Dimensions	
	A	B
MF−PRE−2X01	−−−	5.40
MF−PRE−2X02	4.20	9.60
MF−PRE−2X03	8.40	13.80
MF−PRE−2X04	12.60	18.00
MF−PRE−2X05	16.80	22.20
MF−PRE−2X06	21.00	26.40
MF−PRE−2X07	25.20	30.60
MF−PRE−2X08	29.40	34.80
MF−PRE−2X09	33.60	39.00
MF−PRE−2X10	37.80	43.20
MF−PRE−2X11	42.00	47.40
MF−PRE−2X12	46.20	51.60

MF-PH-1Xxx

Specifications
Current Rating: 9A AC, DC
Voltage Rating: 600V AC,DC
Operating Temp: −25°C~+85°C
Contact Resistance: 10M OHM Max
Insulation Resistance: 1000M OHM Min
Withstanding Voltage: 1500V AC,DC Min
Material: Nylon 66, UL94V−2
Color:Natural(Translucent)

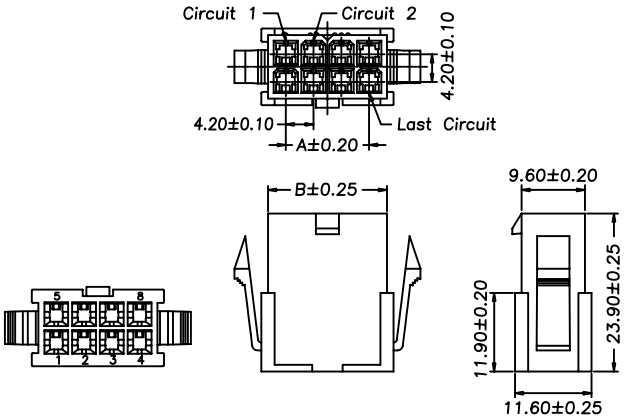


Ordering Information & Dimensions

PART No.	Dimensions	
	A	B
MF−PH−1X02	4.20	9.60
MF−PH−1X03	8.40	13.80
MF−PH−1X04	12.60	18.00
MF−PH−1X05	16.80	22.20

MF-PH-2Xxx

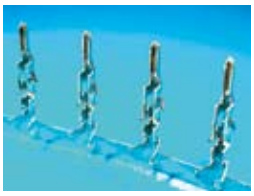
Specifications
Current Rating: 9A AC, DC
Voltage Rating: 600V AC,DC
Operating Temp: −25°C~+85°C
Contact Resistance: 10M OHM Max
Insulation Resistance: 1000M OHM Min
Withstanding Voltage: 1500V AC,DC Min
Material: Nylon 66, UL94V−2
Color:Natural(Translucent)



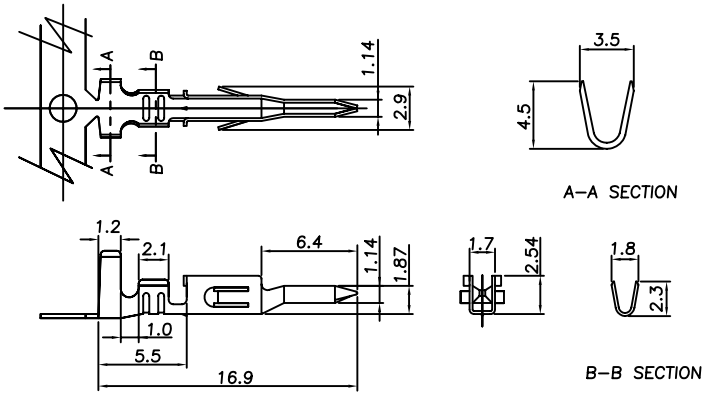
Ordering Information & Dimensions

PART No.	Dimensions	
	A	B
MF−PH−2X01	−−−	5.40
MF−PH−2X02	4.20	9.60
MF−PH−2X03	8.40	13.80
MF−PH−2X04	12.60	18.00
MF−PH−2X05	16.80	22.20
MF−PH−2X06	21.00	26.40
MF−PH−2X07	25.20	30.60
MF−PH−2X08	29.40	34.80
MF−PH−2X09	33.60	39.00
MF−PH−2X10	37.80	43.20
MF−PH−2X11	42.00	47.40
MF−PH−2X12	46.20	51.60

MF-MT-18



TERMINAL
Material: Brass
Thickness: 0.2mm
Plating: Tin plated 60u"
Wire Range: Suitable for AWG#18~22
Insulation O.D: 3.0mm(max)
Q'TY: 5,000 pcs/roll



Discrete wire connectors
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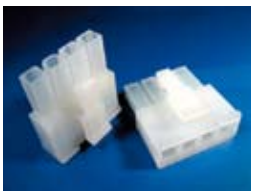
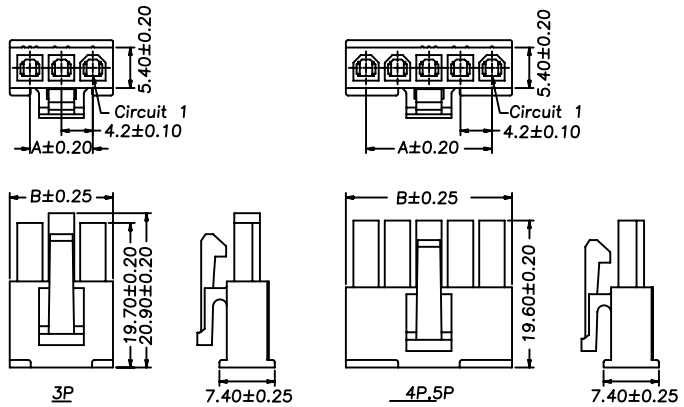
MF-SH-1Xxx



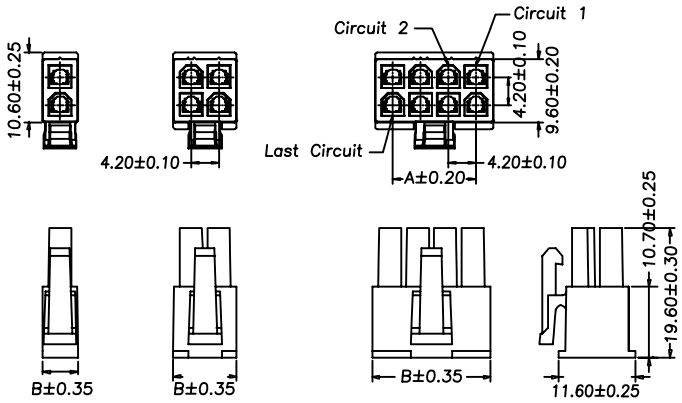


Specifications
Current Rating: 7A AC, DC
Voltage Rating: 250V AC,DC
Operating Temp: −25°C~+85°C
Contact Resistance: 10M OHM Max
Insulation Resistance: 1000M OHM Min
Withstanding Voltage: 1500V AC,DC Min
Material: Nylon 66, UL94V−2

Ordering Information & Dimensions

PART No.	Dimensions	
	A	B
MF−SH−1X03	8.40	13.80
MF−SH−1X04	12.60	18.00
MF−SH−1X05	16.80	22.20

MF-SH-2Xxx

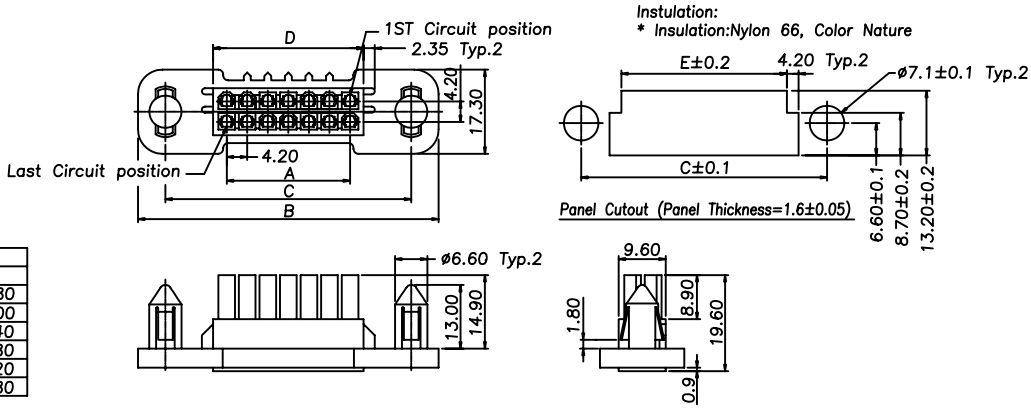


Specifications
Current Rating: 9A AC, DC
Voltage Rating: 600V AC,DC
Operating Temp: −25°C~+85°C
Contact Resistance: 10M OHM Max
Insulation Resistance: 1000M OHM Min
Withstanding Voltage: 1500V AC,DC Min
Material: Nylon 66, UL94V−2
Color:Natural(Translucent)

Ordering Information & Dimensions

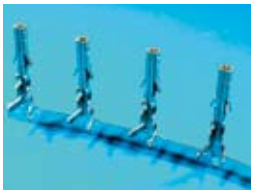
PART No.	Dimensions	
	A	B
MF−SH−2X01	−−−	5.70
MF−SH−2X02	4.20	9.60
MF−SH−2X03	8.40	13.80
MF−SH−2X04	12.60	18.00
MF−SH−2X05	16.80	22.20
MF−SH−2X06	21.00	26.40
MF−SH−2X07	25.20	30.60
MF−SH−2X08	29.40	34.80
MF−SH−2X09	33.60	39.00
MF−SH−2X10	37.80	43.20
MF−SH−2X11	42.00	47.40
MF−SH−2X12	46.20	51.60

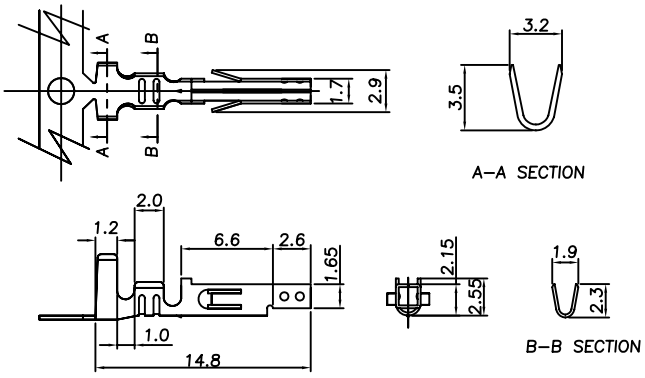
MFB-SH-2Xxx



Circuits	Dimensions				
	A	B	C	D	E
4	4.20	40.40	29.20	9.70	12.80
6	8.40	44.60	33.40	13.90	17.00
10	16.80	53.00	41.80	22.30	25.40
14	25.20	61.40	50.20	30.70	33.80
18	33.60	69.80	58.60	39.10	42.20
24	46.20	82.40	71.20	51.70	54.80

MF-FT-18

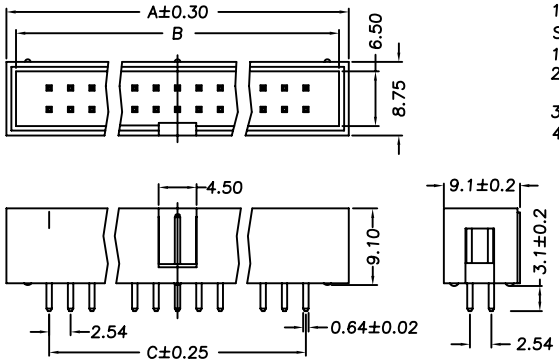


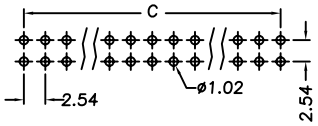


TERMINAL
Material: Brass
Thickness: 0.2mm
Plating: Tin plated 60u"
Wire Range: Suitable for AWG#18~22
Insulation O.D: 2.8mm(max)
Q'TY: 7,000 pcs/roll

2.54mm Connectors

B-D-xx



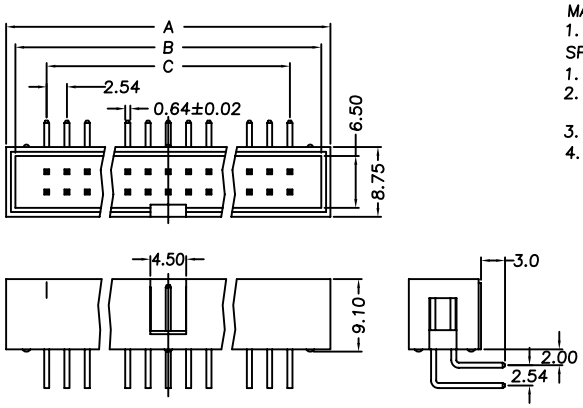


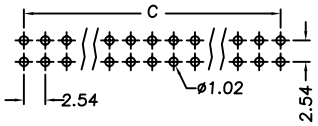
RECOMMEND P.C.B. LAYOUT
BOTTOM VIEW

MATERIALS
1. HOUSING : P.B.T. (UL 94V-0), BLACK.
SPECIFICATION
1. CURRENT RATING : 3 AMP. MAX.
2. INSULATION RESISTANCE : 5000M OHM Min. AT DC 500V
3. CONTACT RESISTANCE:20m ohm Max. AT DC 100mA
4. OPERATING TEMPERATURE : -55°C TO +105°C.

Poles	DIMENSIONS A	B	C	Poles	DIMENSIONS A	B	C
6	15.24	12.94	5.08	26	40.64	38.34	30.48
8	17.78	15.48	7.62	30	45.72	43.42	35.56
10	20.32	18.02	10.16	34	50.80	48.50	40.64
12	22.86	20.56	12.70	40	58.42	56.12	48.26
14	25.40	23.10	15.24	44	63.50	61.20	53.34
16	27.94	25.64	17.78	50	71.12	68.82	60.96
20	33.02	30.72	22.86	60	83.82	81.52	73.66
24	38.10	35.80	27.94	64	88.90	86.60	78.74

B-R-xx



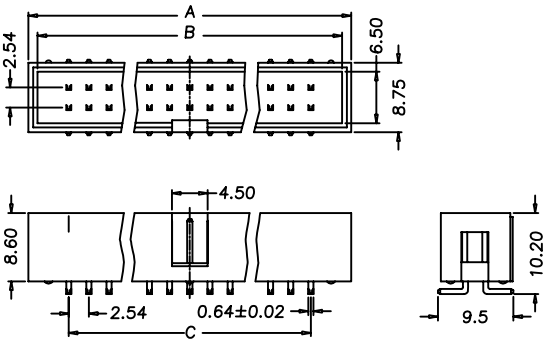


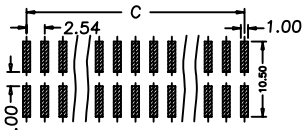
RECOMMEND P.C.B. LAYOUT
BOTTOM VIEW

MATERIALS
1. HOUSING : P.B.T. (UL 94V-0), BLACK.
SPECIFICATION
1. CURRENT RATING : 3 AMP. MAX.
2. INSULATION RESISTANCE : 5000M OHM Min. AT DC 500V
3. CONTACT RESISTANCE:20m ohm Max. AT DC 100mA
4. OPERATING TEMPERATURE : -55°C TO +105°C.

Poles	DIMENSIONS A	B	C	Poles	DIMENSIONS A	B	C
6	15.24	12.94	5.08	26	40.64	38.34	30.48
8	17.78	15.48	7.62	30	45.72	43.42	35.56
10	20.32	18.02	10.16	34	50.80	48.50	40.64
12	22.86	20.56	12.70	40	58.42	56.12	48.26
14	25.40	23.10	15.24	44	63.50	61.20	53.34
16	27.94	25.64	17.78	50	71.12	68.82	60.96
20	33.02	30.72	22.86	60	83.82	81.52	73.66
24	38.10	35.80	27.94	64	88.90	86.60	78.74

B-V-xx



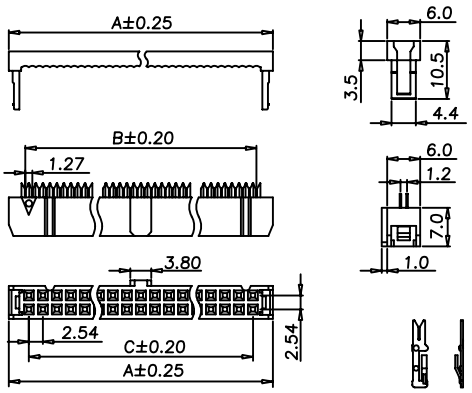


RECOMMEND P.C.B. LAYOUT
TOP VIEW

MATERIALS
1. HOUSING : NYLON 6T (UL 94V-0), BLACK.
SPECIFICATION
1. CURRENT RATING : 3 AMP. MAX.
2. INSULATION RESISTANCE : 5000M OHM Min. AT DC 500V
3. CONTACT RESISTANCE:20m ohm Max. AT DC 100mA
4. OPERATING TEMPERATURE : -55°C TO +105°C.
5. MAX. PROCESSING TEMPERATURE: 230° FOR 30~60 SECONDS.

Poles	DIMENSIONS A	B	C	Poles	DIMENSIONS A	B	C
6	15.24	12.94	5.08	26	40.64	38.34	30.48
8	17.78	15.48	7.62	30	45.72	43.42	35.56
10	20.32	18.02	10.16	34	50.80	48.50	40.64
12	22.86	20.56	12.70	40	58.42	56.12	48.26
14	25.40	23.10	15.24	44	63.50	61.20	53.34
16	27.94	25.64	17.78	50	71.12	68.82	60.96
20	33.02	30.72	22.86	60	83.82	81.52	73.66
24	38.10	35.80	27.94	64	88.90	86.60	78.74

F-C2-xx



MATERIALS
Insulator : PBT+30% Glass Fiber (UL 94V-0)
Contact Plated : Gold or Tin over Nickel Plated
SPECIFICATION
Current Rating : 1 Amp
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance : 1000M OHM Min at DC 500V.
Contact Resistance: 15m ohm Max.
Operating Termperature : -40°C TO +105°C.

Poles	A	B	C
6	12.32	6.35	5.08
8	14.86	8.89	7.62
10	17.40	11.43	10.16
12	19.94	13.97	12.70
14	22.48	16.51	15.24
16	25.02	19.05	17.78
18	27.56	21.59	20.32
20	30.10	24.13	22.86
24	35.18	29.21	27.94
26	37.72	31.75	30.48
30	42.80	36.83	35.56
34	47.88	41.91	40.64
36	50.42	44.45	43.18
40	55.50	49.53	48.26
44	60.58	54.61	53.34
50	68.20	62.23	60.96
60	80.90	74.93	73.66
64	85.98	80.01	78.74

Ribbon cable connectors

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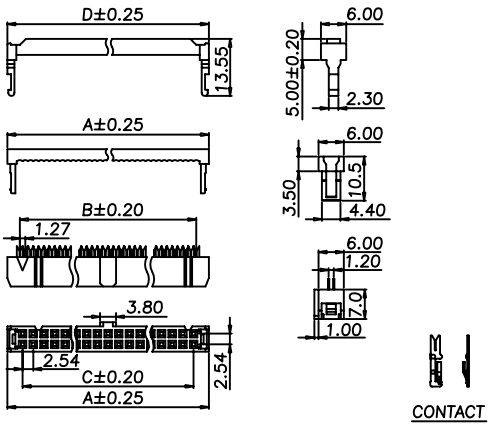
F-C3-xx

MATERIALS
Insulator : PBT+30% Glass Fiber (UL 94V-0)
Contact Plated : Gold or Tin over Nickel Plated

SPECIFICATION
Current Rating : 1 Amp
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance : 1000M OHM Min at DC 500V.
Contact Resistance: 15m ohm Max.
Operating Termperature : -40°C TO +105°C.

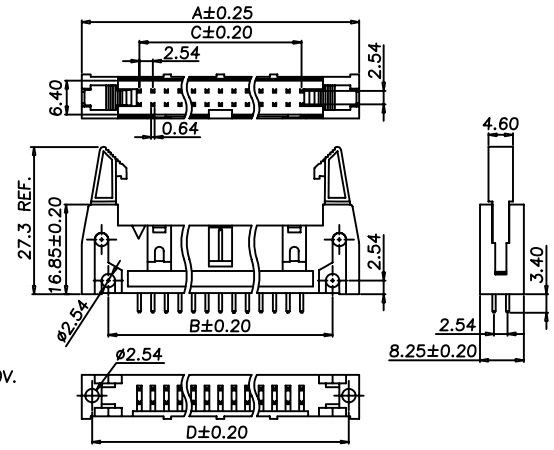


Poles	Dim. A	Dim. B	Dim. C	Dim. D
6	12.32	6.35	5.08	12.12
8	14.86	8.89	7.62	14.66
10	17.40	11.43	10.16	17.20
12	19.94	13.97	12.70	19.74
14	22.48	16.51	15.24	22.28
16	25.02	19.05	17.78	24.82
18	27.56	21.59	20.32	27.36
20	30.10	24.13	22.86	29.90
24	35.18	29.21	27.94	34.98
26	37.72	31.75	30.48	37.52
30	42.80	36.83	35.56	42.80
34	47.88	41.91	40.64	47.68
36	50.42	44.45	43.18	50.22
40	55.50	49.53	48.26	55.30
44	60.58	54.61	53.34	60.38
50	68.20	62.23	60.96	68.40
60	80.90	74.93	73.66	80.70
64	85.98	80.01	78.74	85.78

L-D-xx

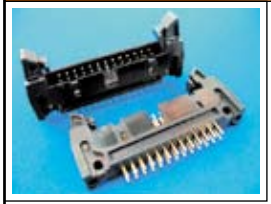
MATERIALS
Insulator : PBT+30% Glass Fiber (UL 94V-0)
Contact Plated : Gold or Tin over Nickel Plated

SPECIFICATION
Current Rating : 3 Amp
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance : 1000M OHM Min at DC 500V.
Contact Resistance: 15m ohm Max.
Operating Termperature : -40°C TO +105°C.
Contact Plating:Gold Flash



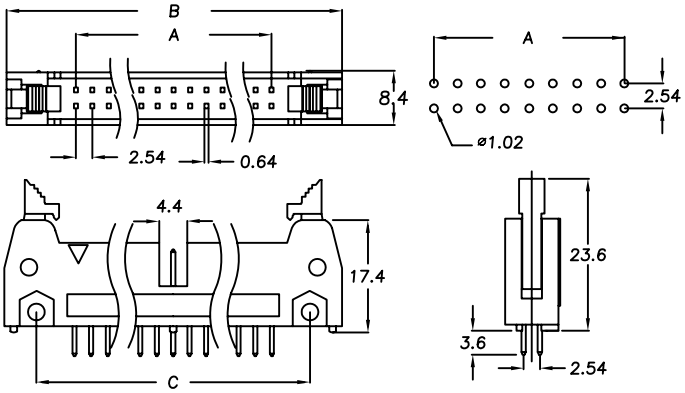
Poles	Dim. A	Dim. B	Dim. C	Dim. D
10	31.90	21.84	10.16	27.94
14	36.98	26.92	15.24	33.02
16	39.52	29.46	17.78	35.56
20	44.60	34.54	22.86	40.64
24	49.68	39.62	27.94	45.72
26	52.22	42.16	30.48	48.26
30	57.30	47.24	35.56	53.34
34	62.38	52.32	40.64	58.42
40	70.00	59.94	48.26	66.04
50	82.70	72.64	60.96	78.74
60	95.40	85.34	73.66	91.44
64	100.48	90.42	78.74	96.52

L-DS-xx



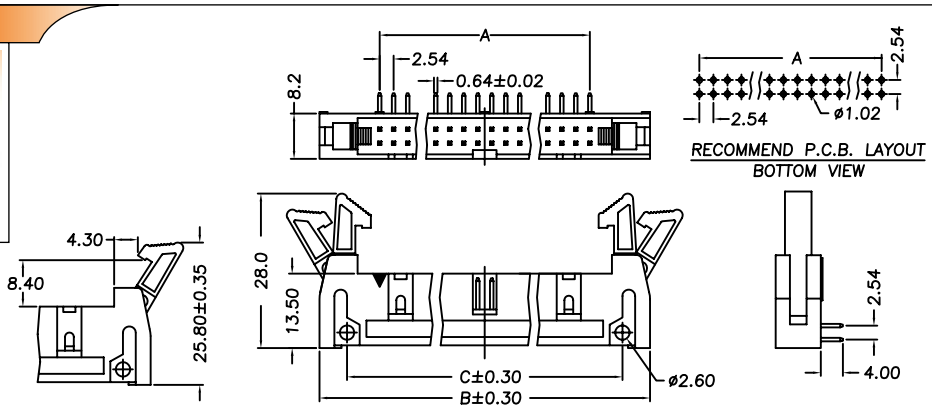
MATERIALS
Insulator : PBT rated (UL 94V-0)
Contact Plated : Gold flash or Tin over Nickel Plated

SPECIFICATION
Current Rating : 3 Amp
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance :5000M OHM Min at DC 500V.
Contact Resistance: 20m ohm Max.
Operating Termperature : -55°C TO +105°C.



Poles	A	B	C
10	10.16	32.00	21.84
14	15.24	37.08	26.92
16	17.78	39.62	29.46
20	22.86	44.70	34.54
24	27.94	49.78	39.62
26	30.48	52.32	42.16
30	35.56	57.40	47.24
34	40.64	62.48	52.32
40	48.26	70.10	59.94
50	60.96	82.80	72.64
60	73.66	95.50	85.34
64	78.74	100.58	90.42

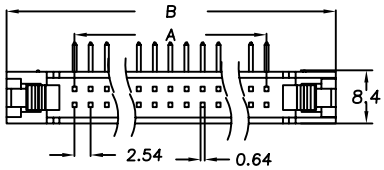
L-R-xx

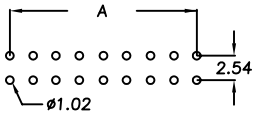


Poles	A	B	C
10	10.16	32.00	21.84
14	15.24	37.08	26.92
16	17.78	39.62	29.46
20	22.86	44.70	34.54
24	27.94	49.78	39.62
26	30.48	52.32	42.16
30	35.56	57.40	47.24
34	40.64	62.48	52.32
40	48.26	70.10	59.94
50	60.96	82.80	72.64
60	73.66	95.50	85.34
64	78.74	100.58	90.42

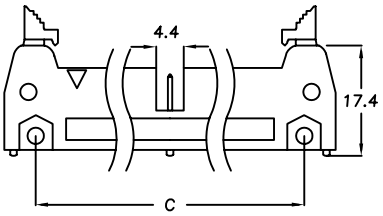
Ribbon cable connectors
排 線 類 連 接 器

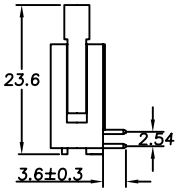
L-RS-xx





P.C.B LAYOUT



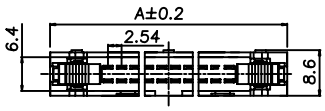


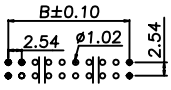
MATERIALS
Insulator : PBT rated (UL 94V-0)
Contact Plated : Gold flash or Tin over Nickel Plated

SPECIFICATION
Current Rating : 3 Amp
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance :5000M OHM Min at DC 500V.
Contact Resistance: 20m ohm Max.
Operating Termperature : -55°C TO +105°C.

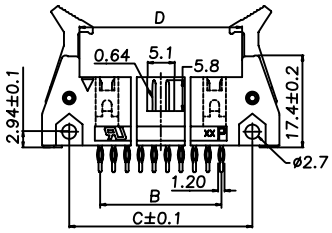
Poles	A	B	C
10	10.16	32.00	21.84
14	15.24	37.08	26.92
16	17.78	39.62	29.46
20	22.86	44.70	34.54
24	27.94	49.78	39.62
26	30.48	52.32	42.16
30	35.56	57.40	47.24
34	40.64	62.48	52.32
40	48.26	70.10	59.94
50	60.96	82.80	72.64
60	73.66	95.50	85.34
64	78.74	100.58	90.42

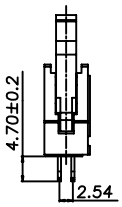
L-P-xx

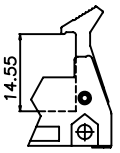




P.C.B LAYOUT







Long Lever

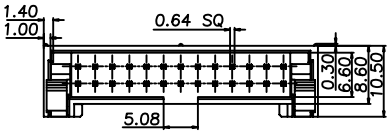
MATERIALS
Housing : 30% Glass Filled PBT (UL 94V-0)
Contact : Brass

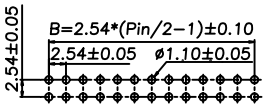
Poles	Dim.A	Dim.B	Dim.C	Dim.D
10	31.88	10.16	21.84	17.96
14	37.02	15.24	26.92	23.04
16	39.52	17.78	29.46	25.58
20	44.74	22.86	34.54	30.66
26	52.20	30.48	42.16	38.28
30	57.28	35.56	47.24	43.36
34	62.40	40.64	52.32	48.44
40	70.04	48.26	59.94	56.06
50	82.72	60.96	72.64	68.76
60	95.40	73.66	85.34	81.46
64	100.50	78.74	90.42	86.54

FL-D-xx

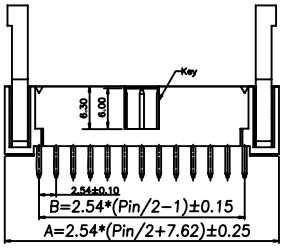
MATERIALS
Housing : High Tempe. Plastic PBT (UL 94V-0)
Contact : Brass

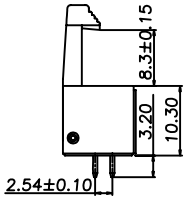
Specifications
Current Rating: 3.0 Amps
Voltage Rating: 250V AC,DC
Operating Temp: -40°C~+105°C
Contact Resistance: 20M OHM Max
Insulation Resistance: 1000M OHM Min
Dielectric Withstanding: 600V AC/Minute





Recommended PCB Layout





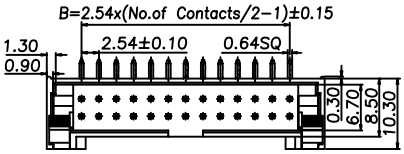
Dimension:

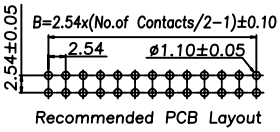
Poles	Dim.A	Dim.B	Poles	Dim.A	Dim.B	Poles	Dim.A	Dim.B
6	15.24	5.08	16	27.94	17.78	34	50.80	40.64
8	17.78	7.62	20	33.02	22.86	40	58.42	48.26
10	20.32	10.16	24	38.10	27.94	50	71.12	60.96
12	22.86	12.70	26	40.64	30.48	60	83.82	73.66
14	25.40	15.24	30	45.72	35.56	64	88.90	78.74

FL-R-xx

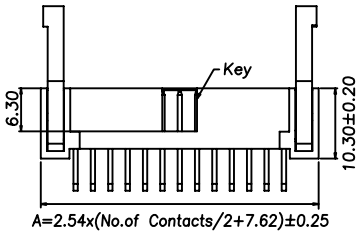
MATERIALS
Housing : High Tempe. Plastic PBT (UL 94V-0)
Contact : Brass

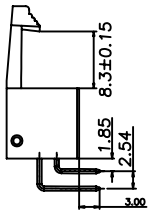
Specifications
Current Rating: 3.0 Amps
Voltage Rating: 250V AC,DC
Operating Temp: -40°C~+105°C
Contact Resistance: 20M OHM Max
Insulation Resistance: 1000M OHM Min
Dielectric Withstanding: 600V AC/Minute





Recommended PCB Layout



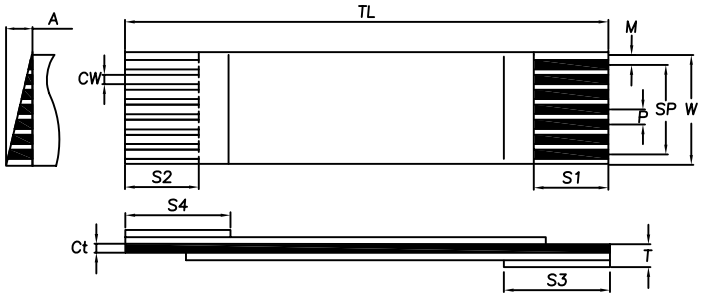


Dimension:

Poles	Dim.A	Dim.B	Poles	Dim.A	Dim.B	Poles	Dim.A	Dim.B
6	15.24	5.08	16	27.94	17.78	34	50.80	40.64
8	17.78	7.62	20	33.02	22.86	40	58.42	48.26
10	20.32	10.16	24	38.10	27.94	50	71.12	60.96
12	22.86	12.70	26	40.64	30.48	60	83.82	73.66
14	25.40	15.24	30	45.72	35.56	64	88.90	78.74

1.00mm Connectors

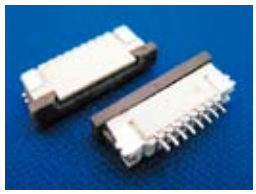
FPA-CB25-130

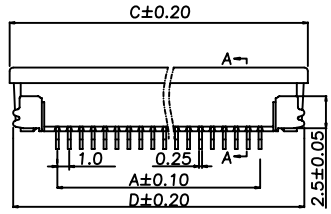


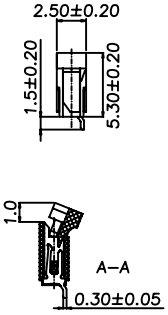
SYMBOL	P	W	SP	M	A	TL	T	S1	S2	S3	S4
PANGE	1.0	26.0	24.0	1.0	0	130	0.3	4	4	8	8
TOLERANCE	±0.08	±0.12	±0.1	±0.15	<0.5	±2.0	±0.05	±1.0	±1.0	±1.0	±1.0

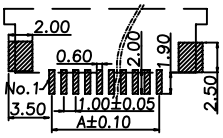
CONDUCTOR SPECIFICATION	Tin Properties Copper wire (Tin 2~5u)	THICKNESS (Ct)	0.05	±0.01
		WIDTH (Cw)	0.65	±0.03

FPA-WZA25-xx





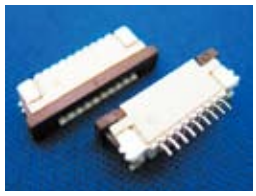


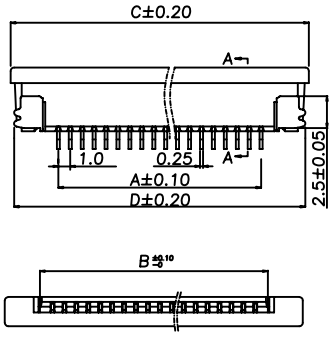


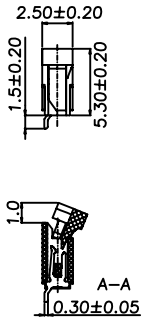
PCS Layout

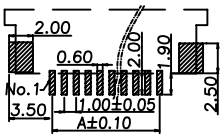
Poles	Dim.A	Dim.B	Dim.C	Dim.D	Poles	Dim.A	Dim.B	Dim.C	Dim.D
04	3	5.2	9.2	11	20	19	21.2	25.2	27
05	4	6.2	10.2	12	21	20	22.2	26.2	28
06	5	7.2	11.2	13	22	21	23.2	27.2	29
07	6	8.2	12.2	14	23	22	24.2	28.2	30
08	7	9.2	13.2	15	24	23	25.2	29.2	31
09	8	10.2	14.2	16	25	24	26.2	30.2	32
10	9	11.2	15.2	17	26	25	27.2	31.2	33
11	10	12.2	16.2	18	27	26	28.2	32.2	34
12	11	13.2	17.2	19	28	27	29.2	33.2	35
13	12	14.2	18.2	20	29	28	30.2	34.2	36
14	13	15.2	19.2	21	30	29	31.2	35.2	37
15	14	16.2	20.2	22	31	30	32.2	36.2	38
16	15	17.2	21.2	23	32	31	33.2	37.2	39
17	16	18.2	22.2	24	33	32	34.2	38.2	40
18	17	19.2	23.2	25	34	33	35.2	39.2	41
19	18	20.2	24.2	26	35	34	36.2	40.2	42

FPA-WZB25-xx





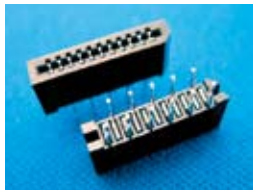


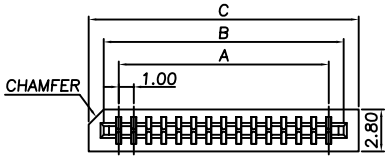


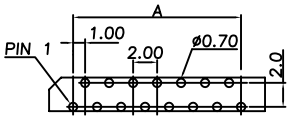
PCS Layout

Poles	Dim.A	Dim.B	Dim.C	Dim.D	Poles	Dim.A	Dim.B	Dim.C	Dim.D
04	3	5.2	9.2	11	20	19	21.2	25.2	27
05	4	6.2	10.2	12	21	20	22.2	26.2	28
06	5	7.2	11.2	13	22	21	23.2	27.2	29
07	6	8.2	12.2	14	23	22	24.2	28.2	30
08	7	9.2	13.2	15	24	23	25.2	29.2	31
09	8	10.2	14.2	16	25	24	26.2	30.2	32
10	9	11.2	15.2	17	26	25	27.2	31.2	33
11	10	12.2	16.2	18	27	26	28.2	32.2	34
12	11	13.2	17.2	19	28	27	29.2	33.2	35
13	12	14.2	18.2	20	29	28	30.2	34.2	36
14	13	15.2	19.2	21	30	29	31.2	35.2	37
15	14	16.2	20.2	22	31	30	32.2	36.2	38
16	15	17.2	21.2	23	32	31	33.2	37.2	39
17	16	18.2	22.2	24	33	32	34.2	38.2	40
18	17	19.2	23.2	25	34	33	35.2	39.2	41
19	18	20.2	24.2	26	35	34	36.2	40.2	42

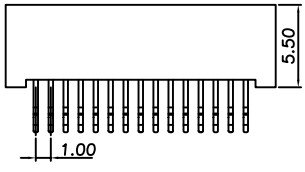
FPA-DL2L-xx

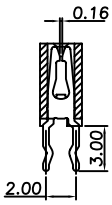


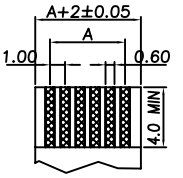




RECOMMENDED PCB LAYOUT







FPC/FFCT=0.30±0.05

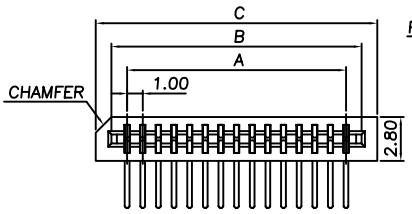
ELECTRICAL
CURRENT RATING: 0.5 AMP.
DIELECTRIC WITHSTANDING VOLTAGEMIN : 500 VAC MIN.
INSULATION RESISTANCE : 1000 MEGAOHMS MIN.
CONTACT RESISTANCE: 30 MILLIOHMS MAX.
TEMPERATURE RANGE: −55°C TO +85°C.

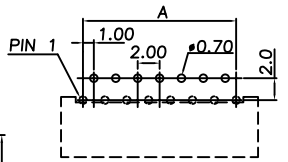
■ DIMENSION TABLE

Poles	Dimension A	Dimension B	Dimension C	Poles	Dimension A	Dimension B	Dimension C
2	1.0	3.1	5	20	19.0	21.1	23
3	2.0	4.1	6	21	20.0	22.1	24
4	3.0	5.1	7	22	21.0	23.1	25
5	4.0	6.1	8	23	22.0	24.1	26
6	5.0	7.1	9	24	23.0	25.1	27
7	6.0	8.1	10	25	24.0	26.1	28
8	7.0	9.1	11	26	25.0	27.1	29
9	8.0	10.1	12	27	26.0	28.1	30
10	9.0	11.1	13	28	27.0	29.1	31
11	10.0	12.1	14	29	28.0	30.1	32
12	11.0	13.1	15	30	29.0	31.1	33
13	12.0	14.1	16	31	30.0	32.1	34
14	13.0	15.1	17	32	31.0	33.1	35
15	14.0	16.1	18	33	32.0	34.1	36
16	15.0	17.1	19	34	33.0	35.1	37
17	16.0	18.1	20	35	34.0	36.1	38
18	17.0	19.1	21	36	35.0	37.1	39
19	18.0	20.1	22				

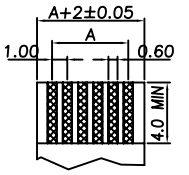
FPC/FFC cable connectors
軟 排 類 連 接 器

FPA-RL2L-xx

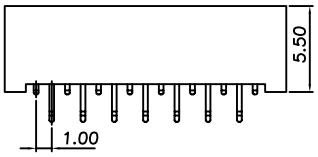


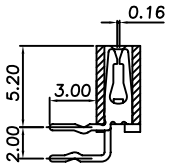


RECOMMENDED PCB LAYOUT



FPC/FFCT=0.30±0.05

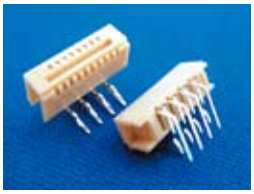




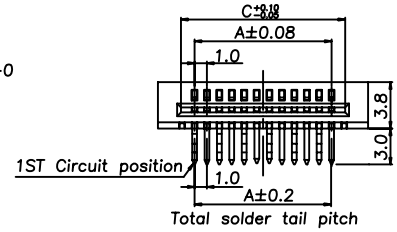
■ DIMENSION TABLE

Poles	Dimension A	Dimension B	Dimension C	Poles	Dimension A	Dimension B	Dimension C
2	1.0	3.1	5	20	19.0	21.1	23
3	2.0	4.1	6	21	20.0	22.1	24
4	3.0	5.1	7	22	21.0	23.1	25
5	4.0	6.1	8	23	22.0	24.1	26
6	5.0	7.1	9	24	23.0	25.1	27
7	6.0	8.1	10	25	24.0	26.1	28
8	7.0	9.1	11	26	25.0	27.1	29
9	8.0	10.1	12	27	26.0	28.1	30
10	9.0	11.1	13	28	27.0	29.1	31
11	10.0	12.1	14	29	28.0	30.1	32
12	11.0	13.1	15	30	29.0	31.1	33
13	12.0	14.1	16	31	30.0	32.1	34
14	13.0	15.1	17	32	31.0	33.1	35
15	14.0	16.1	18	33	32.0	34.1	36
16	15.0	17.1	19	34	33.0	35.1	37
17	16.0	18.1	20	35	34.0	36.1	38
18	17.0	19.1	21	36	35.0	37.1	39
19	18.0	20.1	22				

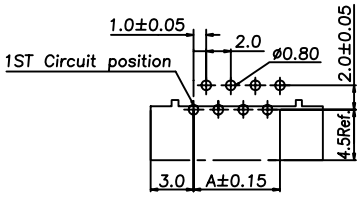
FPA-RLAL-xx



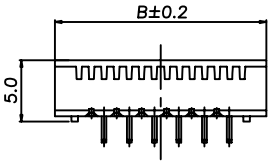
Material:
Insulation:Nylon 6T UL 94V-0
Color Nature
Contact:Phosphor Bronze

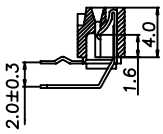


Total solder tail pitch



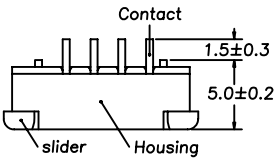
Recommended P.C. Board Layout

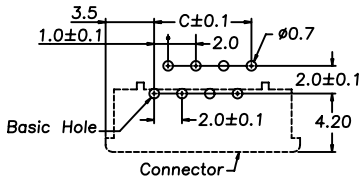




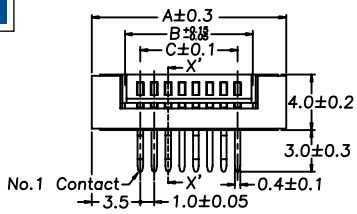
A=1.0 X No.of Spaces
B=A+6.0
C=A+2.1

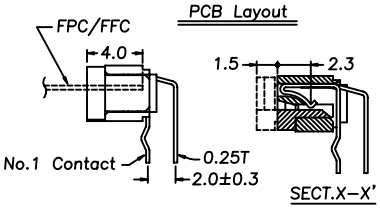
FPA-RZAL50-xx





PCB Layout

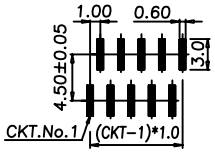




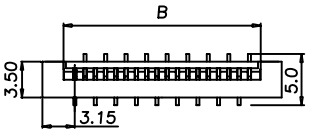
■ DIMENSION TABLE

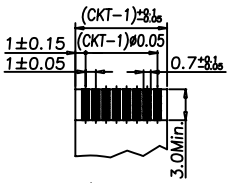
Poles	Dimension A	Dimension B	Dimension C	Poles	Dimension A	Dimension B	Dimension C
4	10.0	5.2	3	19	25.0	20.2	18
5	11.0	6.2	4	20	26.0	21.2	19
6	12.0	7.2	5	21	27.0	22.2	20
7	13.0	8.2	6	22	28.0	23.2	21
8	14.0	9.2	7	23	29.0	24.2	22
9	15.0	10.2	8	24	30.0	25.2	23
10	16.0	11.2	9	25	31.0	26.2	24
11	17.0	12.2	10	26	32.0	27.2	25
12	18.0	13.2	11	27	33.0	28.2	26
13	19.0	14.2	12	28	34.0	29.2	27
14	20.0	15.2	13	29	35.0	30.2	28
15	21.0	16.2	14	30	36.0	31.2	29
16	22.0	17.2	15	31	37.0	32.2	30
17	23.0	18.2	16	32	38.0	33.2	31
18	24.0	19.2	17				

FPA-VZAL61-xx

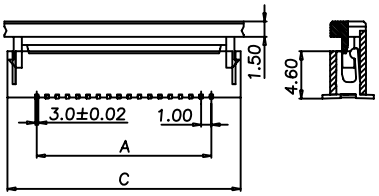


PC Board Layout





FPC/FFCT Dimension
Thickness 0.3±0.05

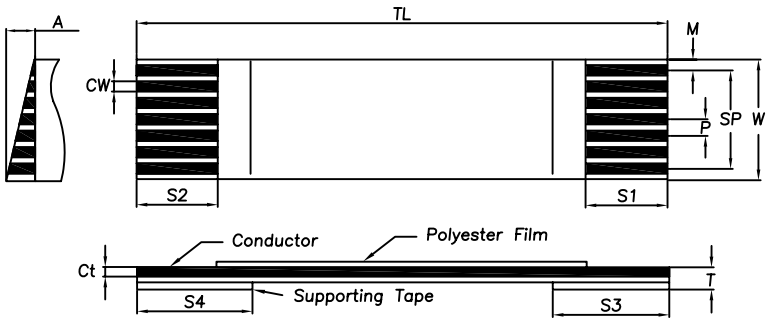


Material:
Insulation:Insulator:L.C.P
Cover:L.C.P
Terminal:Phosphor Bronze

CKT	DIM A	DIM B	DIM C	CKT	DIM A	DIM B	DIM C
16	15.00	17.20	21.00	30	29.00	31.20	35.00
15	14.00	16.20	20.00	29	28.00	30.20	34.00
14	13.00	15.20	19.00	28	27.00	29.20	33.00
13	12.00	14.20	18.00	27	26.00	28.20	32.00
12	11.00	13.20	17.00	26	25.00	27.20	31.00
11	10.00	12.20	16.00	25	24.00	26.20	30.00
10	9.00	11.20	15.00	24	23.00	25.20	29.00
09	8.00	10.20	14.00	23	22.00	24.20	28.00
08	7.00	9.20	13.00	22	21.00	23.20	27.00
07	6.00	8.20	12.00	21	20.00	22.20	26.00
06	5.00	7.20	11.00	20	19.00	21.20	25.00
05	4.00	6.20	10.00	19	18.00	20.20	24.00
04	3.00	5.20	9.00	18	17.00	19.20	23.00
03	2.00	4.20	8.00	17	16.00	18.20	22.00

1.25mm Connectors

FPB-CA26-600

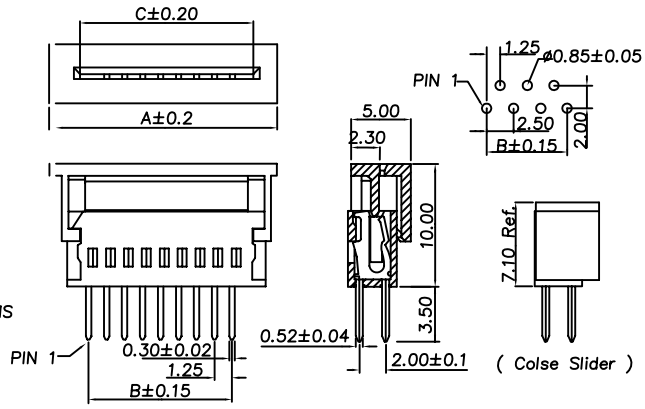


UL NO.: E254391											
SYMBOL	P	W	SP	M	A	TL	T	S1	S2	S3	S4
PANGE	1.25	33.75	31.25	1.25	0	600	0.3	4	4	8	8
TOLERANCE	±0.10	±0.15	±0.15	±0.15	<0.5	±3.0	±0.05	±1.0	±1.0	±2.0	±2.0

CONDUCTOR SPECIFICATION	Tin Properties Copper wire (Tin 1u以上)	THICKNESS (Ct)	0.1	±0.005
		WIDTH (Cw)	0.8	±0.03

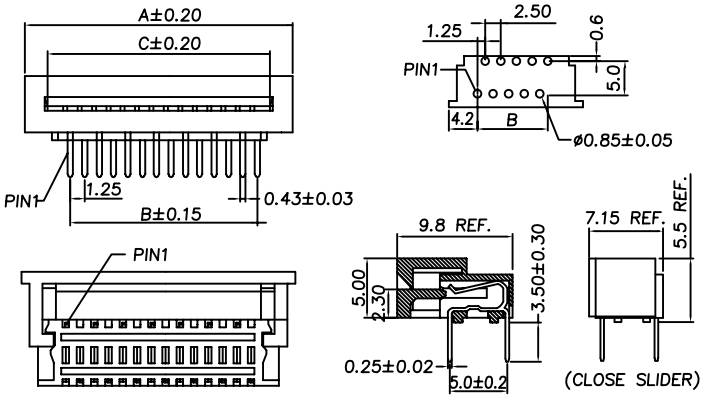
FPB-DZAL-xx

SPECIFICATIONS
Operating Voltage :200V AC Max.
Current Rating : 1AMP Max.
Dielectric Withstanding Voltage: 500A AC RMS
Insulator Resistance : 500 Megohms Max.
Contact Resistance : 20 Milliohms Max.
Durability: 40 Milliohms Max.
After 20 Insertions And Withdraw



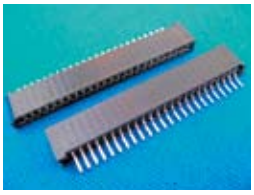
Poles	Dimension A	B	C	Poles	Dimension A	B	C
4	11.45	3.75	6.45	18	28.95	21.25	23.95
5	12.70	5.00	7.70	19	30.20	22.50	25.20
6	13.95	6.20	8.95	20	31.45	23.75	26.45
7	15.20	7.50	10.20	21	32.70	25.00	27.70
8	16.45	8.75	11.45	22	33.95	26.25	28.95
9	17.70	10.00	12.70	23	35.20	27.50	30.20
10	18.95	11.25	13.95	24	36.45	28.75	31.45
11	20.20	12.50	15.20	25	37.70	30.00	32.70
12	21.45	13.75	16.45	26	38.95	31.25	33.95
13	22.70	15.00	17.70	27	40.20	32.50	35.20
14	23.95	16.25	18.95	28	41.45	33.75	36.45
15	25.20	17.50	20.20	29	42.70	35.00	37.70
16	26.45	18.70	21.45	30	43.95	36.25	38.95
17	27.70	20.00	22.70				

FPB-RZAL-xx



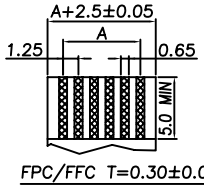
Poles	Dimension A	B	C	Poles	Dimension A	B	C
4	11.45	3.75	6.45	18	28.95	21.25	23.95
5	12.70	5.00	7.70	19	30.20	22.50	25.20
6	13.95	6.20	8.95	20	31.45	23.75	26.45
7	15.20	7.50	10.20	21	32.70	25.00	27.70
8	16.45	8.75	11.45	22	33.95	26.25	28.95
9	17.70	10.00	12.70	23	35.20	27.50	30.20
10	18.95	11.25	13.95	24	36.45	28.75	31.45
11	20.20	12.50	15.20	25	37.70	30.00	32.70
12	21.45	13.75	16.45	26	38.95	31.25	33.95
13	22.70	15.00	17.70	27	40.20	32.50	35.20
14	23.95	16.25	18.95	28	41.45	33.75	36.45
15	25.20	17.50	20.20	29	42.70	35.00	37.70
16	26.45	18.70	21.45	30	43.95	36.25	38.95
17	27.70	20.00	22.70				

FPB-WL2-xx

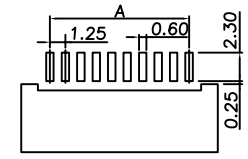


ELECTRICAL
CURRENT RATING: 0.5 AMP.
DIELECTRIC WITHSTANDING VOLTAGE: 500 VAC MIN.
INSULATION RESISTANCE: 1000 MEGAOHMS MIN.
CONTACT RESISTANCE: 30 MILLIOHMS MAX.
TEMPERATURE RANGE: −40°C TO 105°C.

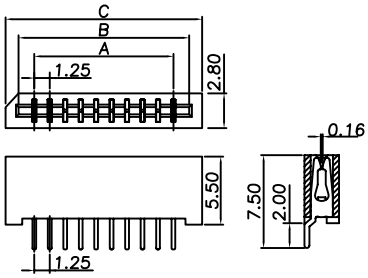
MATERIAL
INSULATOR: GLASS−REINFORCED THERMOPLASTIC.
CONTACT: COPPER ALLOY.
TIN PLATED OVER NICKEL



FPC/FFC T=0.30±0.05



RECOMMENDED PCB LAYOUT



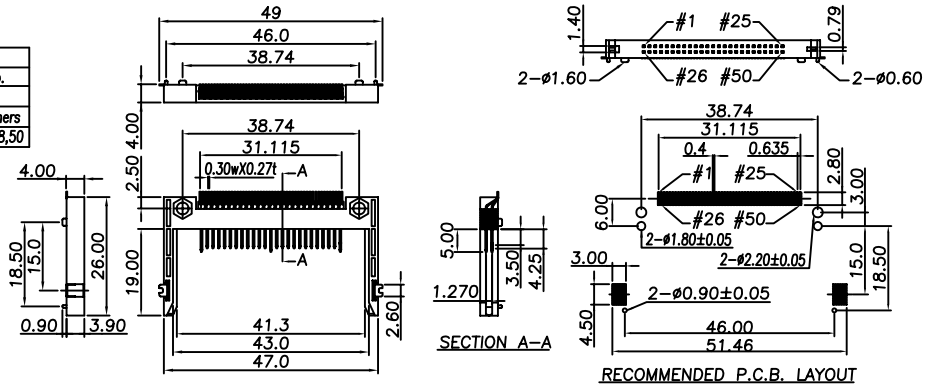
Circuits	A	B	C	Circuits	A	B	C
2	1.25	3.80	5.90	20	23.75	26.30	28.40
3	2.50	5.05	7.15	21	25.00	27.55	29.65
4	3.75	6.30	8.40	22	26.25	28.80	30.90
5	5.00	7.55	9.65	23	27.50	30.05	32.15
6	6.25	8.80	10.90	24	28.75	31.30	33.40
7	7.50	10.05	12.15	25	30.00	32.55	34.65
8	8.75	11.30	13.40	26	31.25	33.80	35.90
9	10.00	12.55	14.65	27	32.50	35.05	37.15
10	11.25	13.80	15.90	28	33.75	36.30	38.40
11	12.50	15.05	17.15	29	35.00	37.55	39.65
12	13.75	16.30	18.40	30	36.25	38.80	40.90
13	15.00	17.55	19.65	31	37.50	40.05	42.15
14	16.25	18.80	20.90	32	38.75	41.30	43.40
15	17.50	20.05	22.15	33	40.00	42.55	44.65
16	18.75	21.30	23.40	34	41.25	43.80	45.90
17	20.00	22.55	24.65	35	42.50	45.05	47.15
18	21.25	23.80	25.90	36	43.75	46.30	48.40
19	22.50	25.05	27.15				

CF Card Connectors

CFC-PW38CE001-50

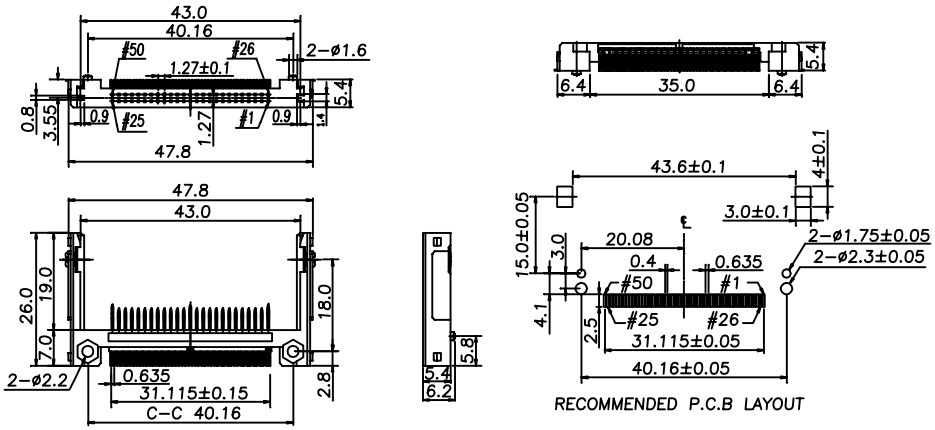
TABLE		
Pin Type	Interface Dim.	Pin No.
Detect	3.5mm (0.138In.)	25,26
General	4.25mm (0.167In.)	The others
Power	5.0mm (0.197In.)	01,13,38,50

MATERIAL
HOUSING: HIGH TEMPERATURE THERMOPLASTIC.
CONTACT: COPPER ALLOY.
PED: BRASS.
PLATING
CONTACT: UNDERPLATED: 50 u" MIN Ni.
CONTACT AREA: SELECT GOLD OVER Ni PLATED.
SOLDER TAIL: 100 u" MIN Sn/Pb OVER Ni PLATED.
PED: 100 u" MIN Sn/Pb OVER 50 u" MIN Ni PLATED.



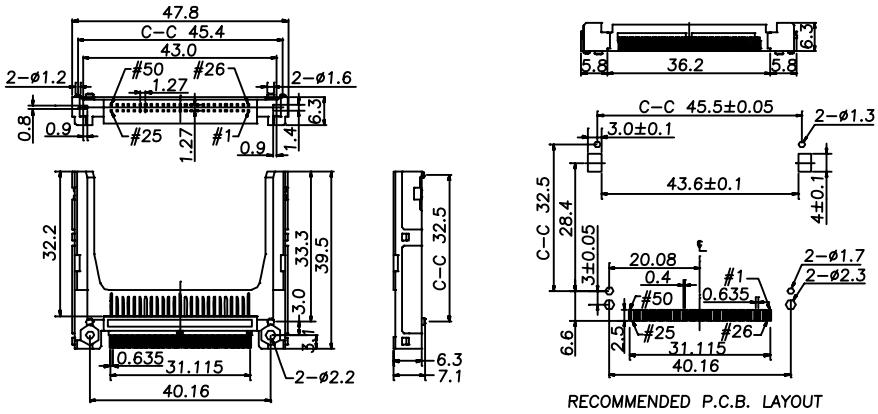
CFC-PW40BE111-50

MATERIAL
Insulator:Glass Reinforced LCP UL94V–0
Contacts:Brass Alloy
Mount ear:Brass;Tin plated overall
CONTACT PLATING
Contact ared:Gold plating over 40u"Nickel
Solder tail area:100u" tin plating over 40u" Nickel



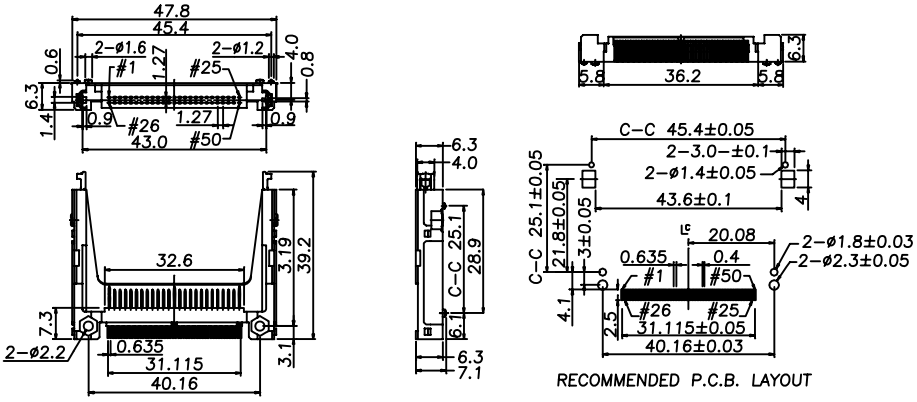
CFC-PW40CE201-50

MATERIAL
Insulator:Glass Reinforced LCP UL94V–0
Contacts:Brass Alloy
Mount ear:Brass;Tin plated overall
CONTACT PLATING
Contact ared:Gold plating over 40u"Nickel
Solder tail area:100u" tin plating over 40u" Nickel

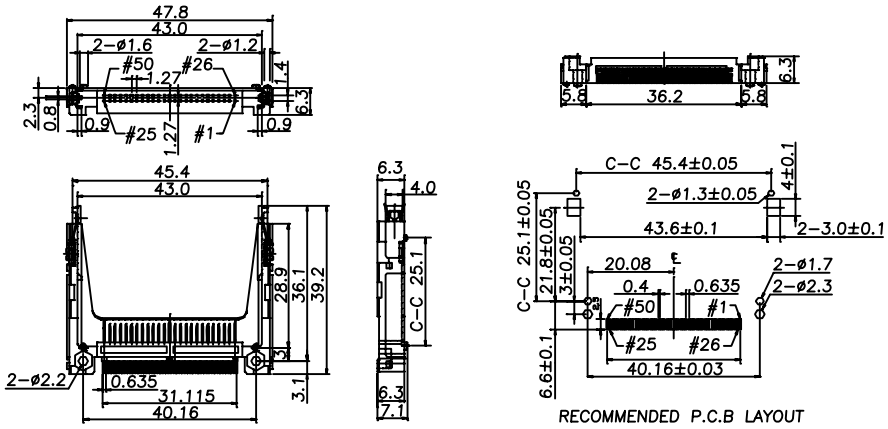


CFC-PW40CE202H-50

MATERIAL
Insulator:Glass Reinforced LCP UL94V–0
Contacts:Brass Alloy
Mount ear:Brass;Tin plated overall
CONTACT PLATING
Contact ared:Gold plating over 40u"Nickel
Solder tail area:100u" tin plating over 40u" Nickel



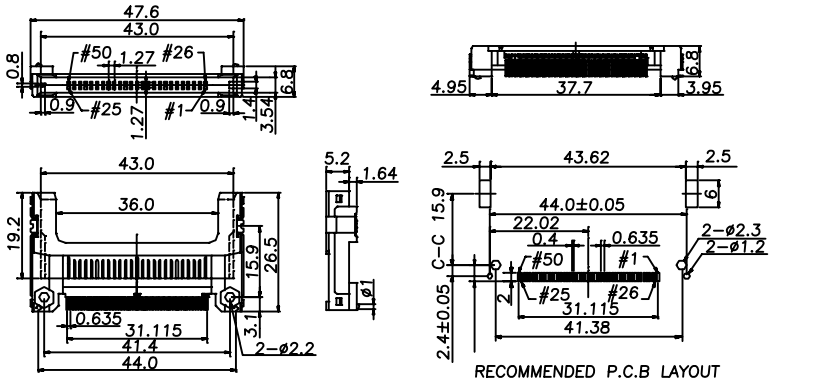
CFC-PW40CE201H-50



MATERIAL
Insulator:Glass Reinforced LCP UL94V-0
Contacts:Brass Alloy
Mount ear:Brass;Tin plated overall

CONTACT PLATING
Contact ared:Gold plating over 40u"Nickel
Solder tail area:100u" tin plating over 40u" Nickel

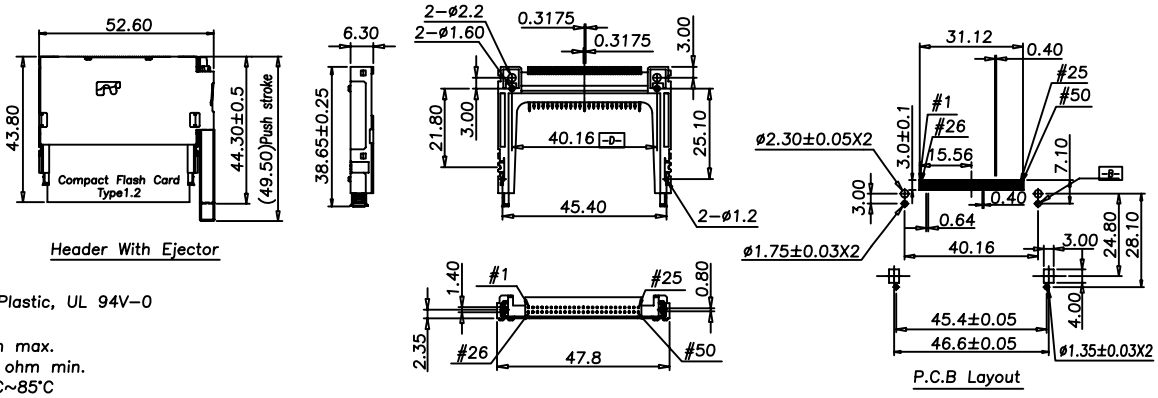
CFC-PW44BE111-50



MATERIAL
Insulator:Glass Reinforced LCP UL94V-0
Contacts:Brass Alloy
Mount ear:Brass;Tin plated overall

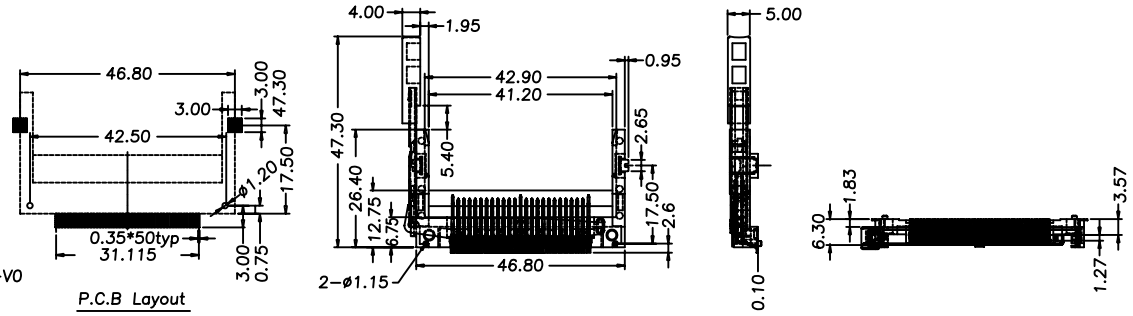
CONTACT PLATING
Contact ared:Gold plating over 40u"Nickel
Solder tail area:100u" tin plating over 40u" Nickel

CFC-PW40CE201RS-50



MATERIAL
Housing: High Temperature Plastic, UL 94V-0
Contacts:Copper Alloy
contact resistance:40m Ohm max.
Insulation Resistace: 1000M ohm min.
Operation Temperature:-40°C~85°C

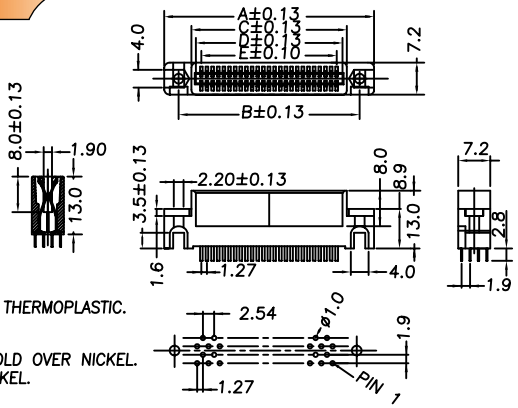
CFC-PW42BE011RS-50



MATERIAL
Housing: LCP 30% G,F., UL94-V0
Contacts: Copper Alloy
Pad: Brass
Rotating arm: stainless steel t=0.40
Push bar: Stainless steel t=0.30
Button:PBT 30% G,F., UL94-V0 rated

Edge Card Connectors

HES-DE-xxx

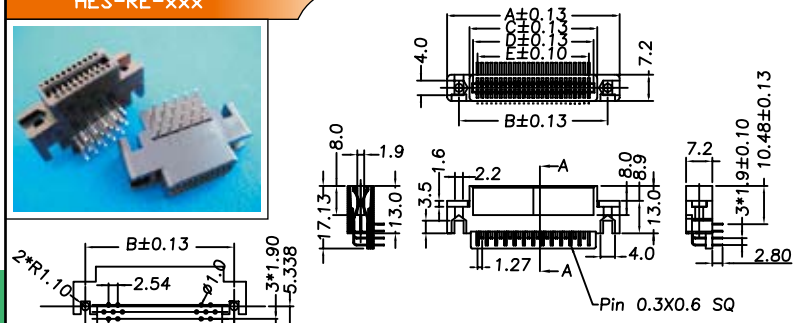


MATERIAL
INSULATOR: GLASS-REINFORCED THERMOPLASTIC.
CONTACT: COPPER ALLOY.
PLATING:
MATING AREA – GOLD FLASH GOLD OVER NICKEL.
SOLDER AREA – TIN OVER NICKEL.

PIN	DIMENSION A	B	C	D	E
10	21.85	15.35	9.60	7.62	5.08
12	23.12	16.62	10.87	8.89	6.35
18	26.93	20.43	14.68	12.70	10.16
20	28.20	21.70	15.95	13.97	11.43
22	29.47	22.97	17.22	15.24	12.70
28	33.28	26.78	21.03	19.05	16.51
30	34.55	28.05	22.30	20.32	17.78
32	35.82	29.32	23.57	21.59	19.05
34	37.09	30.59	24.84	22.86	20.32
36	38.36	31.86	26.11	24.13	21.59
38	39.63	33.13	27.38	25.40	22.86
40	40.90	34.40	28.65	26.67	24.13
42	42.17	35.67	29.92	27.94	25.40
44	43.44	36.94	31.19	29.21	26.67
46	44.71	38.21	32.46	30.48	27.94
48	45.98	39.48	33.73	31.75	29.21
50	47.25	40.75	35.00	33.02	30.48

PIN	DIMENSION A	B	C	D	E
56	51.06	44.56	38.81	36.83	34.29
60	53.60	47.10	41.35	39.37	36.83
62	54.87	48.37	42.62	40.64	38.10
64	56.14	49.64	43.89	41.91	39.37
68	58.68	52.18	46.43	44.45	41.91
70	59.95	53.45	47.70	45.72	43.18
72	61.22	54.72	48.97	46.99	44.45
80	66.30	59.80	54.05	52.07	49.53
90	72.65	66.15	60.40	58.42	55.88
98	77.73	71.23	65.48	63.50	60.96
100	79.00	72.50	66.75	64.77	62.23
110	85.35	78.85	73.10	71.12	68.58
112	86.62	80.12	74.37	72.39	69.85
120	91.70	85.20	79.45	77.47	74.93
124	94.24	87.74	81.99	80.01	77.47
164	119.64	113.14	107.39	105.41	102.87
184	132.34	125.84	120.09	118.11	115.57

HES-RE-xxx

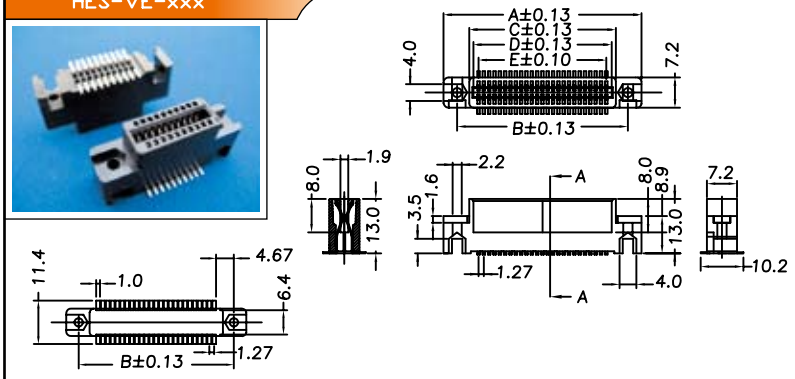


RECOMMENDED PCB LAYOUT (TOP VIEW)

PIN	DIMENSION A	B	C	D	E
10	21.85	15.35	9.60	7.62	5.08
12	23.12	16.62	10.87	8.89	6.35
18	26.93	20.43	14.68	12.70	10.16
20	28.20	21.70	15.95	13.97	11.43
22	29.47	22.97	17.22	15.24	12.70
28	33.28	26.78	21.03	19.05	16.51
30	34.55	28.05	22.30	20.32	17.78
32	35.82	29.32	23.57	21.59	19.05
34	37.09	30.59	24.84	22.86	20.32
36	38.36	31.86	26.11	24.13	21.59
38	39.63	33.13	27.38	25.40	22.86
40	40.90	34.40	28.65	26.67	24.13
42	42.17	35.67	29.92	27.94	25.40
44	43.44	36.94	31.19	29.21	26.67
46	44.71	38.21	32.46	30.48	27.94
48	45.98	39.48	33.73	31.75	29.21
50	47.25	40.75	35.00	33.02	30.48

PIN	DIMENSION A	B	C	D	E
56	51.06	44.56	38.81	36.83	34.29
60	53.60	47.10	41.35	39.37	36.83
62	54.87	48.37	42.62	40.64	38.10
64	56.14	49.64	43.89	41.91	39.37
68	58.68	52.18	46.43	44.45	41.91
70	59.95	53.45	47.70	45.72	43.18
72	61.22	54.72	48.97	46.99	44.45
80	66.30	59.80	54.05	52.07	49.53
90	72.65	66.15	60.40	58.42	55.88
98	77.73	71.23	65.48	63.50	60.96
100	79.00	72.50	66.75	64.77	62.23
110	85.35	78.85	73.10	71.12	68.58
112	86.62	80.12	74.37	72.39	69.85
120	91.70	85.20	79.45	77.47	74.93
124	94.24	87.74	81.99	80.01	77.47
164	119.64	113.14	107.39	105.41	102.87
184	132.34	125.84	120.09	118.11	115.57

HES-VE-xxx

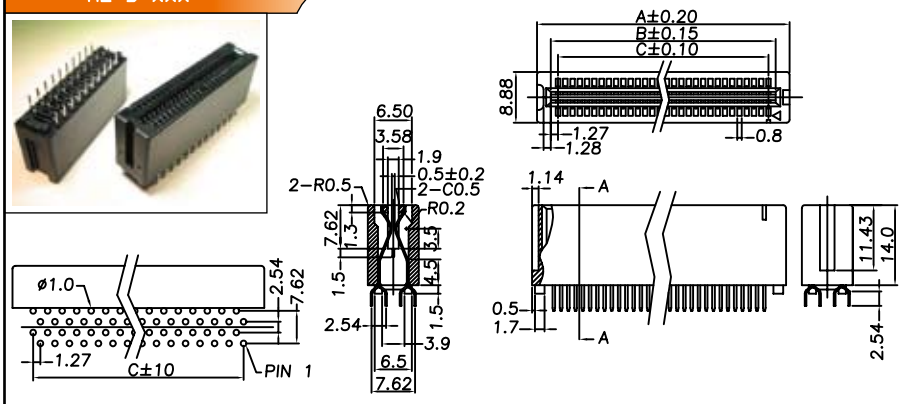


RECOMMENDED PCB LAYOUT (TOP VIEW)

PIN	DIMENSION A	B	C	D	E
10	21.85	15.35	9.60	7.62	5.08
12	23.12	16.62	10.87	8.89	6.35
18	26.93	20.43	14.68	12.70	10.16
20	28.20	21.70	15.95	13.97	11.43
22	29.47	22.97	17.22	15.24	12.70
28	33.28	26.78	21.03	19.05	16.51
30	34.55	28.05	22.30	20.32	17.78
32	35.82	29.32	23.57	21.59	19.05
34	37.09	30.59	24.84	22.86	20.32
36	38.36	31.86	26.11	24.13	21.59
38	39.63	33.13	27.38	25.40	22.86
40	40.90	34.40	28.65	26.67	24.13
42	42.17	35.67	29.92	27.94	25.40
44	43.44	36.94	31.19	29.21	26.67
46	44.71	38.21	32.46	30.48	27.94
48	45.98	39.48	33.73	31.75	29.21
50	47.25	40.75	35.00	33.02	30.48

PIN	DIMENSION A	B	C	D	E
56	51.06	44.56	38.81	36.83	34.29
60	53.60	47.10	41.35	39.37	36.83
62	54.87	48.37	42.62	40.64	38.10
64	56.14	49.64	43.89	41.91	39.37
68	58.68	52.18	46.43	44.45	41.91
70	59.95	53.45	47.70	45.72	43.18
72	61.22	54.72	48.97	46.99	44.45
80	66.30	59.80	54.05	52.07	49.53
90	72.65	66.15	60.40	58.42	55.88
98	77.73	71.23	65.48	63.50	60.96
100	79.00	72.50	66.75	64.77	62.23
110	85.35	78.85	73.10	71.12	68.58
112	86.62	80.12	74.37	72.39	69.85
120	91.70	85.20	79.45	77.47	74.93
124	94.24	87.74	81.99	80.01	77.47
164	119.64	113.14	107.39	105.41	102.87
184	132.34	125.84	120.09	118.11	115.57

HE-D-xxx



RECOMMENDED PCB LAYOUT (TOP VIEW)

Circuit	Dimension A	B	C
04	8.64	3.81	1.27
06	9.91	5.08	2.54
08	11.18	6.35	3.81
10	12.45	7.62	5.08
12	13.72	8.89	6.35
14	14.99	10.16	7.62
16	16.26	11.43	8.89
18	17.53	12.70	10.16
20	18.80	13.97	11.43
22	20.07	15.24	12.70
24	21.34	16.51	13.97
26	22.61	17.78	15.24
28	23.88	19.05	16.51
30	25.15	20.32	17.78
32	26.42	21.59	19.05
34	27.69	22.86	20.32
36	28.96	24.13	21.59

Circuit	Dimension A	B	C
38	30.23	25.40	22.86
40	31.50	26.67	24.13
42	32.77	27.94	25.40
44	34.04	29.21	26.67
46	35.31	30.48	27.94
48	36.58	31.75	29.21
50	37.85	33.02	30.48
52	39.12	34.29	31.75
54	40.39	35.56	33.02
56	41.66	36.83	34.29
58	42.93	38.10	35.56
60	44.20	39.37	36.83
80	56.90	52.07	49.53
100	69.60	64.77	62.23
120	82.30	77.47	74.93
128	87.38	82.55	80.01
160	107.70	102.87	100.33
182	121.67	116.84	114.30

Card slot connectors
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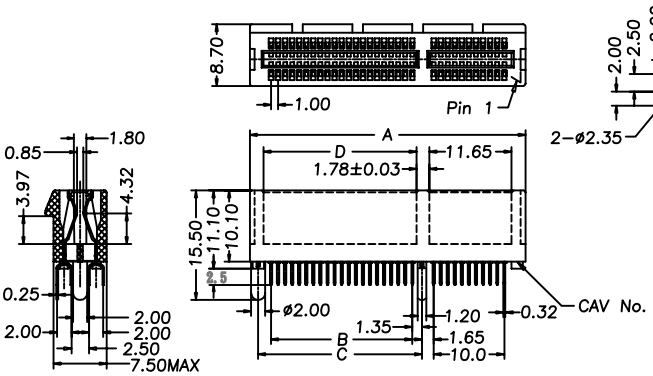
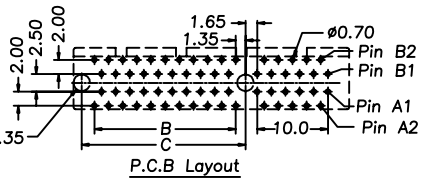
PCIX-D-xxx

MATERIAL
Body: Nyon 66, Glass Fider 30%
UL 94V-0 Rated Color;White,Black,Cav,No.A~H
Contacts: Brass or Phosphor Bronze
Contact resistance:30m Ohm max.
Current Resistance:1.1 Ampere
Insulation Resistace: 1000M ohm min.
AT 500V AC
Operation Temperature:-55°C~105°C





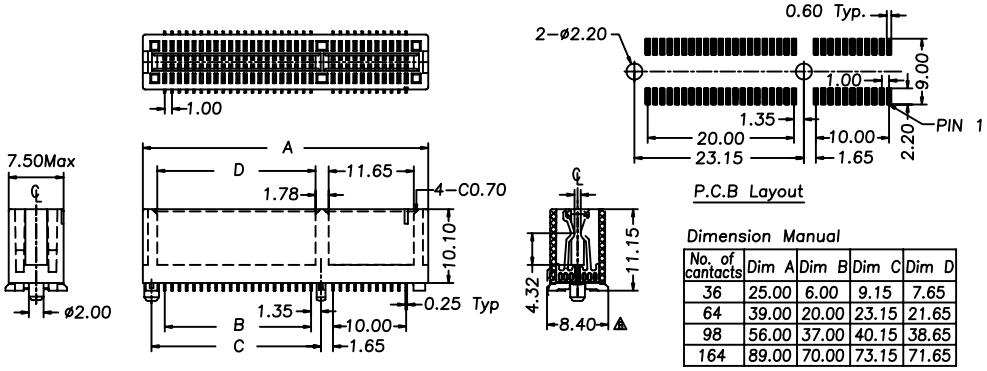
P.C.B Layout

Dimension Manual

No. of cantacts	Dim A	Dim B	Dim C	Dim D
36	25.00	6.00	9.15	7.65
64	39.00	20.00	23.15	21.65
98	56.00	37.00	40.15	38.65
164	89.00	70.00	73.15	71.65

PCIX-VP-xxx

MATERIAL
Body: Nyon 66, Glass Fider 30%
UL 94V-0 Rated Color;White,Black,Cav,No.A~H
Contacts: Brass or Phosphor Bronze
Contact resistance: 30m Ohm max.
Current Resistance: 1.1 Ampere
Insulation Resistace: 1000M ohm min. AT 500V AC
Operation Temperature: -55°C~105°C

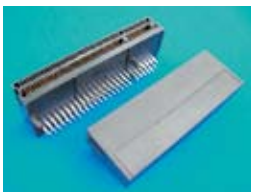


P.C.B Layout

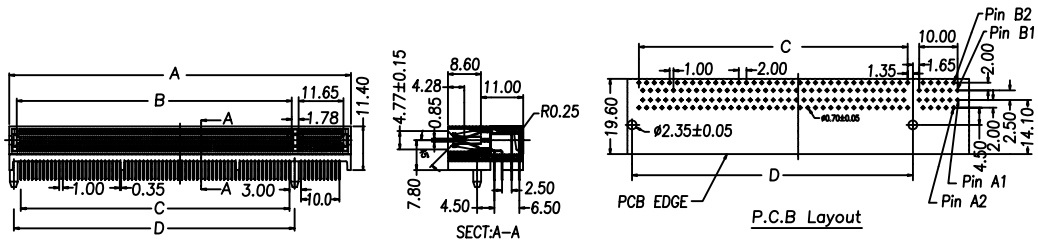
Dimension Manual

No. of cantacts	Dim A	Dim B	Dim C	Dim D
36	25.00	6.00	9.15	7.65
64	39.00	20.00	23.15	21.65
98	56.00	37.00	40.15	38.65
164	89.00	70.00	73.15	71.65

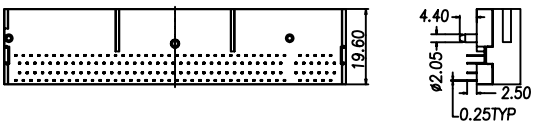
PCIX-R-xxx



MATERIAL
Housing: Nyon46, Glass Fider 30%
UL 94V-0 Rated Color;Black
Contacts: Brass
Contact resistance: 30m Ohm max.
Current Resistance: 1.1 Ampere
Insulation Resistace: 1000M ohm min.
AT 500V AC
Operation Temperature: -55°C~105°C



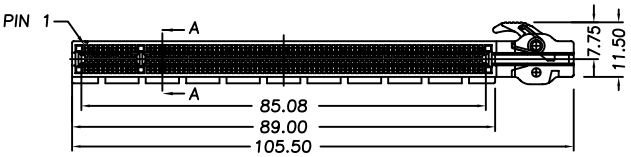
P.C.B Layout

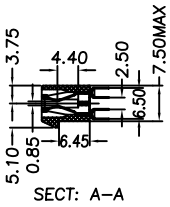


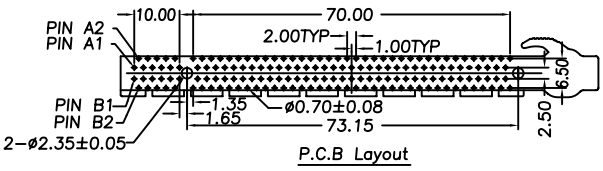
No. of cantacts	Dim A	Dim B	Dim C	Dim D	Dim E
280	147.0	129.65	128.0	131.15	130.15
164	89.00	71.65	70.00	73.15	72.15
98	56.00	38.65	37.00	40.15	39.15
64	39.00	21.65	20.00	23.15	22.15
36	25.00	7.65	6.00	9.15	8.15

PCIX-DL-164

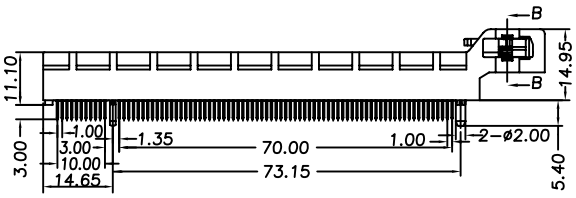
MATERIAL
Housing: Nyon46, Glass Fider 30%
UL 94V-0 Rated Color;Black
Contacts: Brass
Contact resistance: 30m Ohm max.
Current Resistance: 1.1 Ampere
Insulation Resistace: 1000M ohm min.
AT 500V AC
Operation Temperature: -55°C~105°C

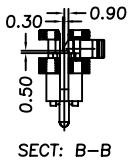






P.C.B Layout





Card slot connectors
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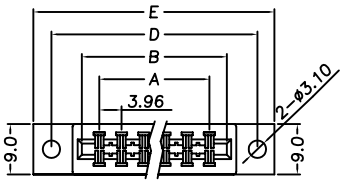
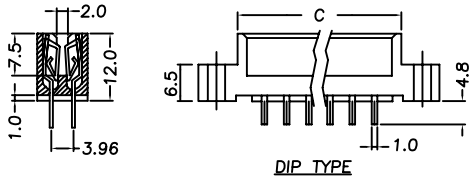
KE-DLE-xx

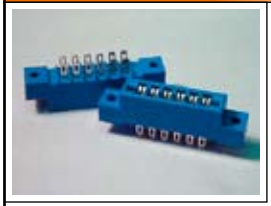


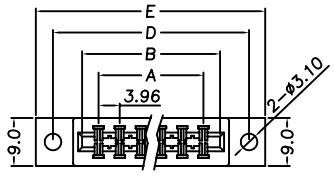


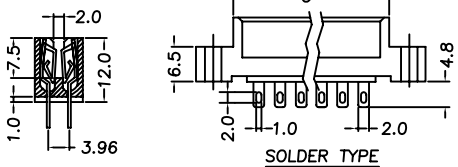
MATERIAL
INSULATOR: PBT +30% GLASS FIBER (UL94V-0).
CONTACT: PHOSPHOR BRONZE OR BRASS.
PLATING: GOLD OVER NICKEL.
SPECIFICATION
CURRENT RATING: 3 AMP.
INSULATION RESISTANCE: 5000 MEGOHMS MIN AT 500 VDC.
CONTACT RESISTANCE: 20 MILLIOHMS MAX.
VOLTAGE : 500V FOR ONE MINUTE.
TEMPERATURE RANGE: -40°C TO +105°C.

Circuit	Dimension					Circuit	Dimension				
	A	B	C	D	E		A	B	C	D	E
10	15.84	24.06	27.40	34.94	41.24	44	83.16	91.38	94.72	102.26	108.56
12	19.80	28.02	31.36	38.90	45.20	46	87.12	95.34	98.68	106.22	112.52
16	27.72	35.94	39.28	46.82	53.12	50	95.04	103.26	106.60	114.14	120.44
20	35.64	43.86	47.20	54.74	61.04	56	106.92	115.14	118.48	126.02	132.32
24	43.56	51.78	55.12	62.66	68.96	60	114.84	123.06	126.40	133.94	140.24
26	47.52	55.74	59.08	66.62	72.92	62	118.80	127.02	130.36	137.90	144.20
28	51.48	59.70	63.04	70.58	76.88	64	122.76	130.98	134.32	141.86	148.16
30	55.44	63.66	67.00	74.54	80.84	70	134.64	142.86	146.20	153.74	160.04
32	59.40	67.62	70.96	78.50	84.80	72	138.60	146.82	150.16	157.70	164.00
36	67.32	75.54	78.88	86.42	92.72	86	166.32	174.54	177.88	185.49	191.48
40	75.24	83.46	86.80	94.34	100.64						

KE-SLE-xx

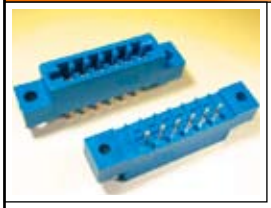


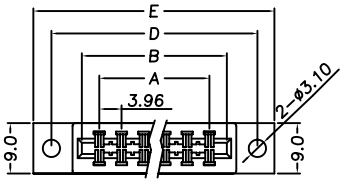


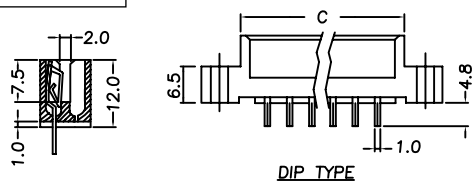


Circuit	Dimension					Circuit	Dimension				
	A	B	C	D	E		A	B	C	D	E
10	15.84	24.06	27.40	34.94	41.24	44	83.16	91.38	94.72	102.26	108.56
12	19.80	28.02	31.36	38.90	45.20	46	87.12	95.34	98.68	106.22	112.52
16	27.72	35.94	39.28	46.82	53.12	50	95.04	103.26	106.60	114.14	120.44
20	35.64	43.86	47.20	54.74	61.04	56	106.92	115.14	118.48	126.02	132.32
24	43.56	51.78	55.12	62.66	68.96	60	114.84	123.06	126.40	133.94	140.24
26	47.52	55.74	59.08	66.62	72.92	62	118.80	127.02	130.36	137.90	144.20
28	51.48	59.70	63.04	70.58	76.88	64	122.76	130.98	134.32	141.86	148.16
30	55.44	63.66	67.00	74.54	80.84	70	134.64	142.86	146.20	153.74	160.04
32	59.40	67.62	70.96	78.50	84.80	72	138.60	146.82	150.16	157.70	164.00
36	67.32	75.54	78.88	86.42	92.72	86	166.32	174.54	177.88	185.49	191.48
40	75.24	83.46	86.80	94.34	100.64						

KE-DLE-1Xxx

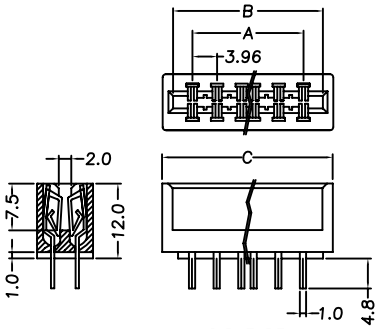






Circuit	Dimension					Circuit	Dimension				
	A	B	C	D	E		A	B	C	D	E
05	15.84	24.06	27.40	34.94	41.24	22	83.16	91.38	94.72	102.26	108.56
06	19.80	28.02	31.36	38.90	45.20	23	87.12	95.34	98.68	106.22	112.52
08	27.72	35.94	39.28	46.82	53.12	25	95.04	103.26	106.60	114.14	120.44
10	35.64	43.86	47.20	54.74	61.04	28	106.92	115.14	118.48	126.02	132.32
11	39.60	47.82	51.16	58.70	65.00	30	114.84	123.06	126.40	133.94	140.24
12	43.56	51.78	55.12	62.66	68.96	31	118.80	127.02	130.36	137.90	144.20
14	51.48	59.70	63.04	70.58	76.88	32	122.76	130.98	134.32	141.86	148.16
15	55.44	63.66	67.00	74.54	80.84	35	134.64	142.86	146.20	153.74	160.04
16	59.40	67.62	70.96	78.50	84.80	36	138.60	146.82	150.16	157.70	164.00
18	67.32	75.54	78.88	86.42	92.72	43	166.32	174.54	177.88	185.49	191.48
20	75.24	83.46	86.80	94.34	100.64						

KE-DXE-xx

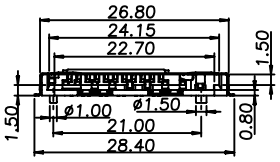


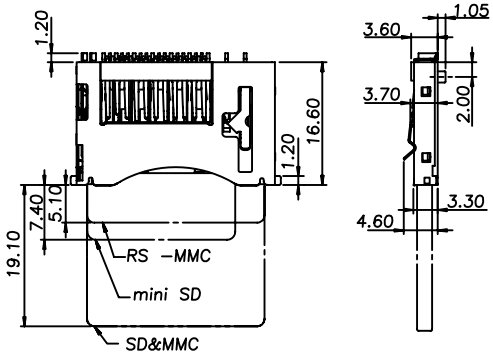
MATERIAL
INSULATOR: PBT +30% GLASS FIBER (UL94V-0).
CONTACT: PHOSPHOR BRONZE OR BRASS.
PLATING: GOLD OVER NICKEL.
SPECIFICATION
CURRENT RATING: 3 AMP.
INSULATION RESISTANCE: 5000 MEGOHMS MIN AT 500 VDC.
CONTACT RESISTANCE: 20 MILLIOHMS MAX.
VOLTAGE : 500V FOR ONE MINUTE.
TEMPERATURE RANGE: -40°C TO +105°C.

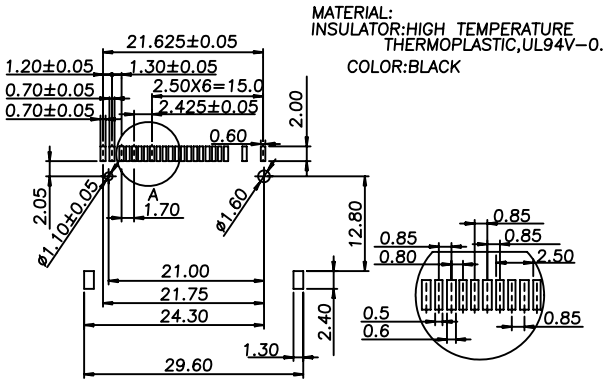
Circuit	Dimension			Circuit	Dimension		
	A	B	C		A	B	C
10	15.84	24.06	27.40	44	83.16	91.38	94.72
12	19.80	28.02	31.36	46	87.12	95.34	98.68
16	27.72	35.94	39.28	50	95.04	103.26	106.60
20	35.64	43.86	47.20	56	106.92	115.14	118.48
24	43.56	51.78	55.12	60	114.84	123.06	126.40
26	47.52	55.74	59.08	62	118.80	127.02	130.36
28	51.48	59.70	63.04	64	122.76	130.98	134.32
30	55.44	63.66	67.00	70	134.64	142.86	146.20
32	59.40	67.62	70.96	72	138.60	146.82	150.16
36	67.32	75.54	78.88				
40	75.24	83.46	86.80				

Memory Card Connector

MHC-W21-401

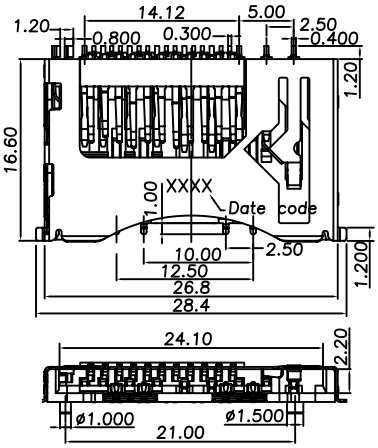


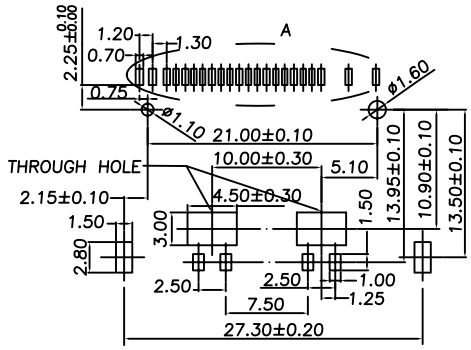




MHC-W21-601

Specification
Insulator: High Temperature Thermoplastic,
Color Black ,UL 94V–0.
Contact: Phosphor–Bronze
Current Rating :0.5mA max.
Contact Resistance:100m ohm max.
Insulation Resistance:1000M OHM min./500VDC
Dielectric Withstanding Voltage:500VAC/1 minute
Operating Temperature:–25°C TO+85°C
Mating Cycles:10,000 Insertions

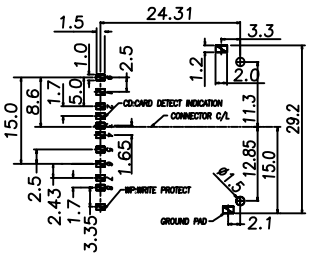




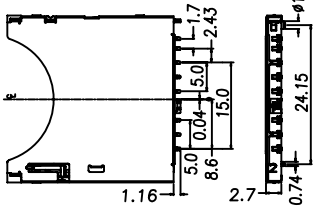
Usable Memory Card:
SD&mini SD&MMC&RS MMC&MMC 4.0&RS MMC 4.0 Card

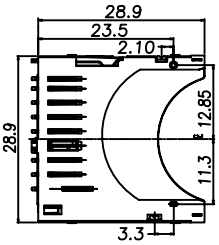
SDC-W24PB02-09

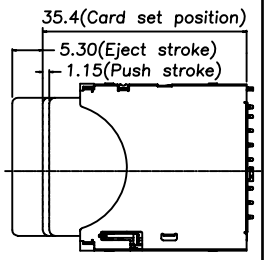
Specification
Insulator: LCP,rated UL94V–0
Color Black
Contact: Phosphor–Bronze
Current Rating :0.5mA max.
Contact Resistance:100m ohm max.
Insulation Resistance:1000M OHM min./250VDC
Dielectric Withstanding Voltage:500VAC/1 minute
Operating Temperature:–20°C TO+65°C



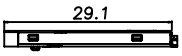
PCB LAYOUT

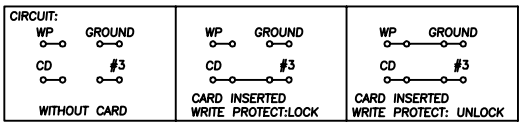




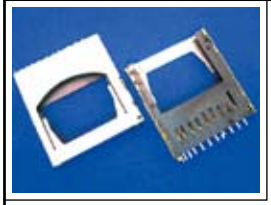


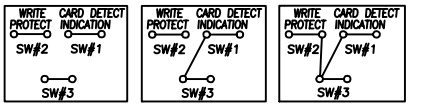
View of inserted card

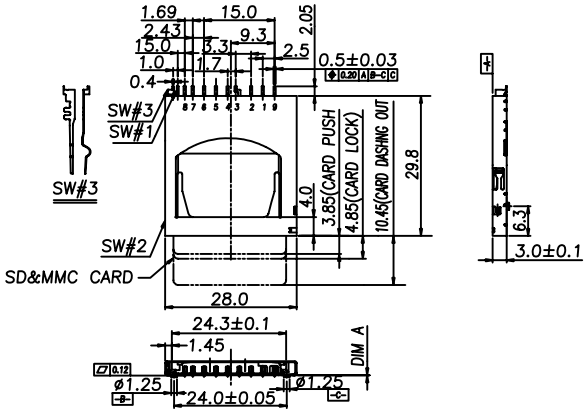


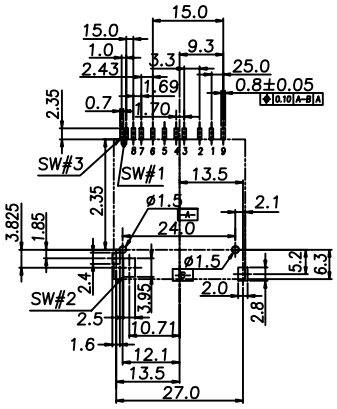


SDC-W24PB10-09



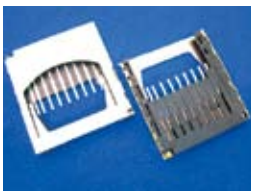


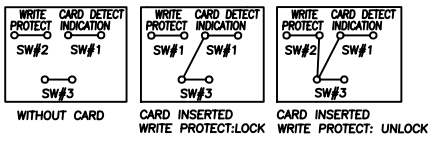


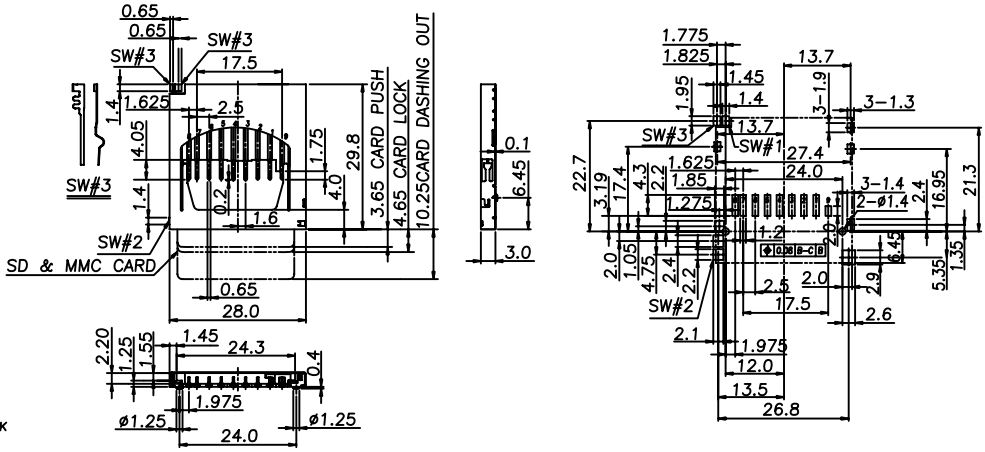


Card slot connectors
卡 槽 類 連 接 器

SDC-W24PC21-09

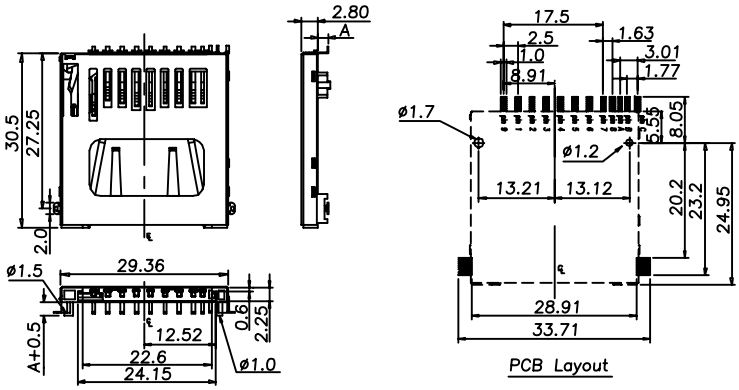






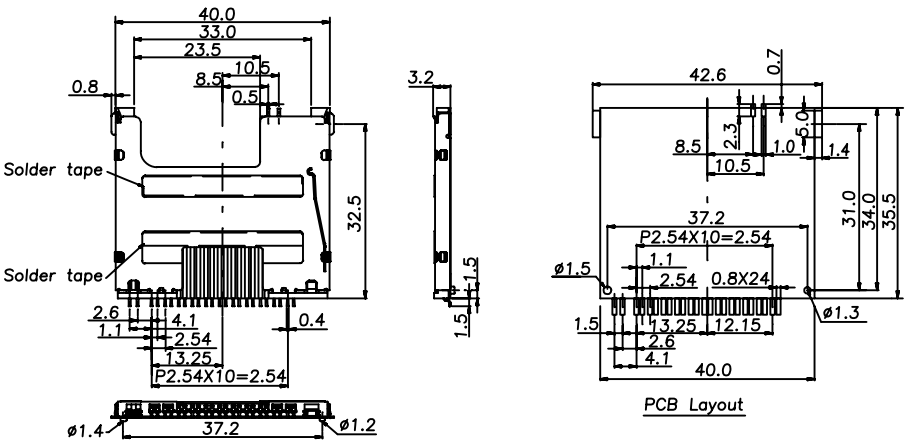
SDC-W26PAxx-09

Part No.	Dimension
	A
SDC-W26PA-09	0.10
SDC-W26PA18-09	1.80
SDC-W26PA24-09	2.40



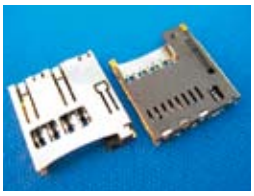
Specification
Housing:Glass-Filled Themo-plastic,UL94V-0
Current Rating :0.5mA max.
Contact Resistance:100m ohm max.
Insulation Resistance:1000M OHM min./250VDC
Dielectric Withstanding Voltage:500VAC/1 minute
Operating Temperature:-25°C TO+60°C

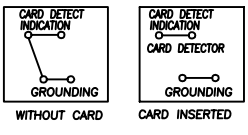
SMC-W37-22

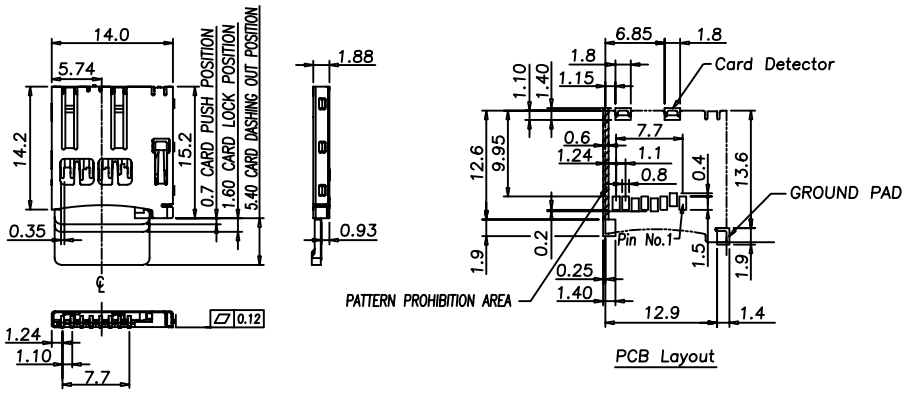


Specification
Insulator: Nylon+30% UL94V-0
G/F Black
Contact: Phosphor-Bronze

TFC-WPCE-08





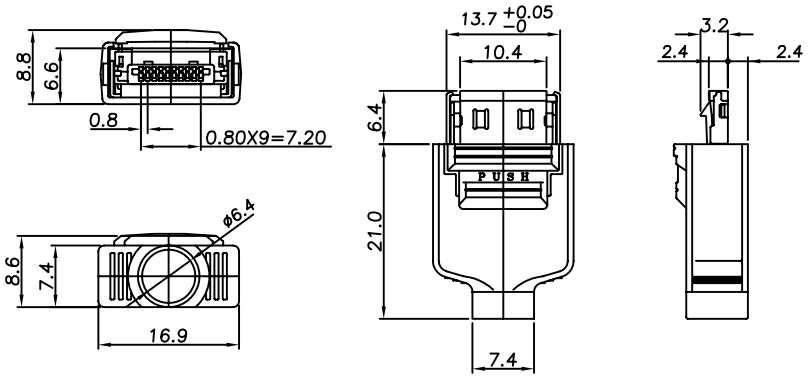


Specification
Housing: Themo-plastic,UL94V-0
Color Black
Contact: Phosphor-Bronze
Operating Temperature:-25°C TO+85°C

PC Card Connectors

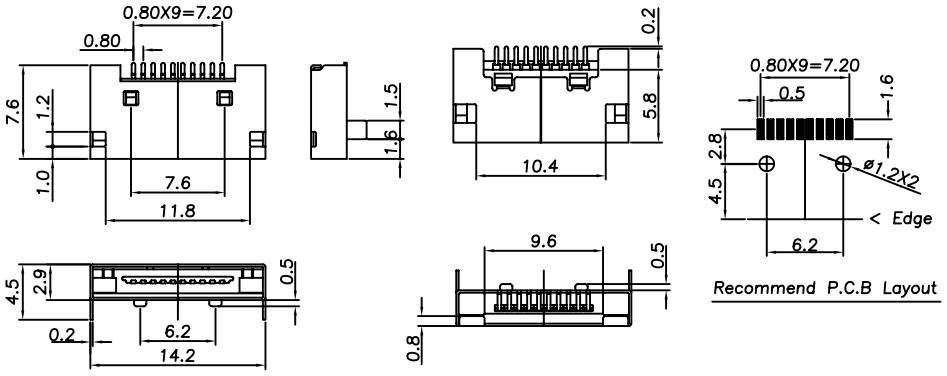
PCM-PA-10

2. PLATING:
   2-1.PIN:TIN,GOLD 10u"
   2-2.SHELL:NICKEL 60u"



NOTE:
1. MATERIAL:
   1-1.PLASTIC COVER: C1200(ABC+PC)94-VO
   1-2.HOUSING: PBT+30GF(BLACK)
   1-3.METAL UP COVER: NICKEL SILVER
   1-4.METAL DOWN COVER: BRASS
   1-5.PIN: PHOSPHOR BRONZE
   1-6.SPRING: STAINLESS SUS#301

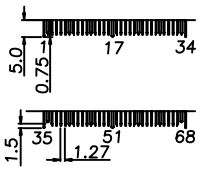
PCM-JW-10

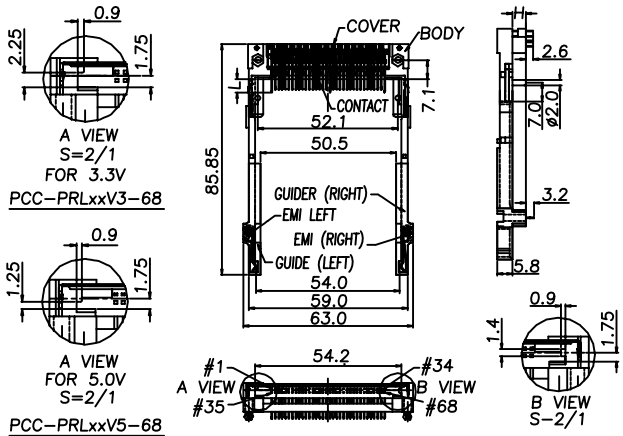


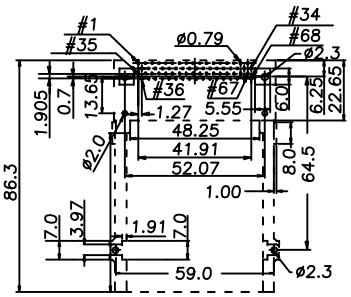
NOTE:
1. MATERIAL:
   1-1.SHELL: STAINLESS SUS#301
   1-2.PIN: PHOSPHOR BRONZE
   1-3.HOUSING: LCP(BLACK)
2. PLATING:
   2-1.PIN: TIN 10u";GOLD 10u"
   2-2.SHELL: NICKEL 50u"

PCC-PRLxxVx-68

H	Dimension
00	0.00mm
20	2.00mm
28	2.80mm
40	4.00mm
50	5.00mm
80	8.00mm
22	2.20mm

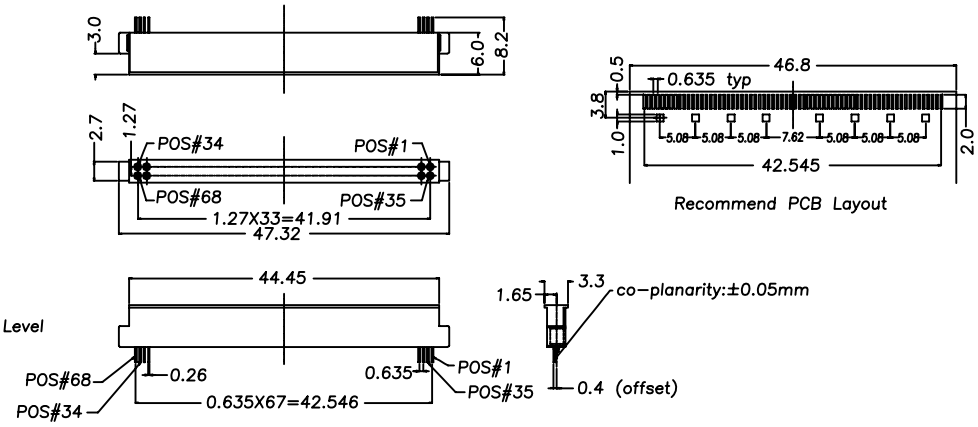






TYPE	CONTACT NO.	L
DETECT	36,67	3.5
GENERAL	OTHERS	4.25
POWER	1.17.34.35.51.68	5.0

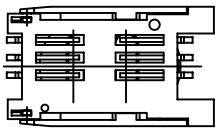
PCC-SW04-68

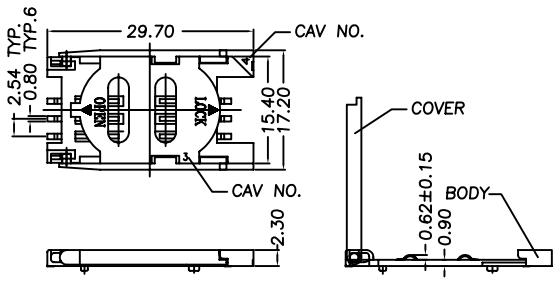


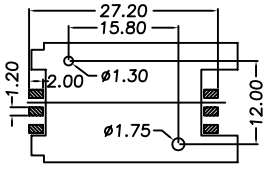
Specification
Housing: Glass Filled LCP,UL94V-0
Color Black
Current Rating :0.5mA max.
Dielectric Withstanding Voltage:500 Vrms at Sed Level
Operating Temperature:-10°C TO+70°C

SIM Card Connectors

SCV-W2523P-06





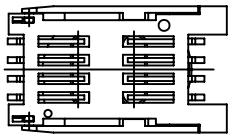


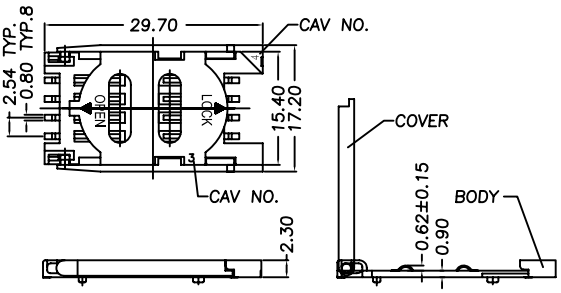
RECOMMEND P.C.B. LAYOUT
TOP VIEW

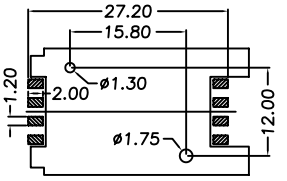
*Specification:
1.Current Rating: 0.5 AMP. Max.;
2.Dielectric Withstanding Voltage: 500V AC R.M.S For One Minute;
3.Insulation Resistance: 1000 M Ohms Min. AT 500V AC;
4.Contact Resistance: 30 M Ohms Max.;
5.Operatimg Temperature: −25°C to +85°C;
6.Processing Temp: 230°C for 30~60 Seconds Max.;
7.Durability: 5000 Cycles.

NOTES
*Material:
1.Body: LCP UL 94V−0 Rated, Color:Black;
2.Cover: LCP UL 94V−0 Rated, Color:Black;
3.Contact: Phosphor Bronze;

SCV-W2523P-08





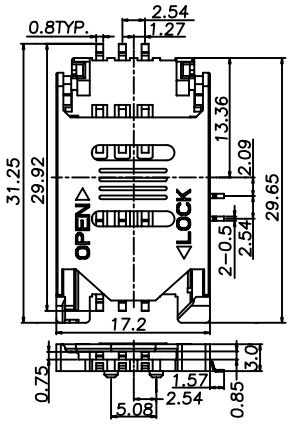


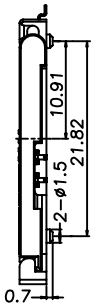
RECOMMEND P.C.B. LAYOUT
TOP VIEW

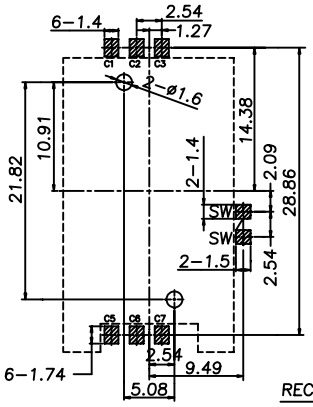
*Specification:
1.Current Rating: 0.5 AMP. Max.;
2.Dielectric Withstanding Voltage: 500V AC R.M.S For One Minute;
3.Insulation Resistance: 1000 M Ohms Min. AT 500V AC;
4.Contact Resistance: 30 M Ohms Max.;
5.Operatimg Temperature: −25°C to +85°C;
6.Processing Temp: 230°C for 30~60 Seconds Max.;
7.Durability: 5000 Cycles.

NOTES
*Material:
1.Body: LCP UL 94V−0 Rated, Color:Black;
2.Cover: LCP UL 94V−0 Rated, Color:Black;
3.Contact: Phosphor Bronze;

SCV-W2830PB-06



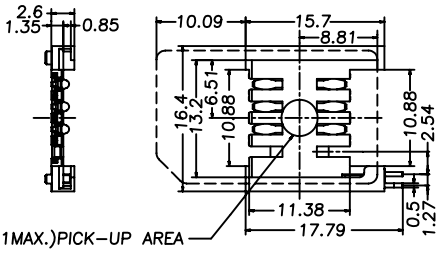


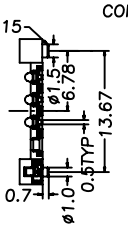


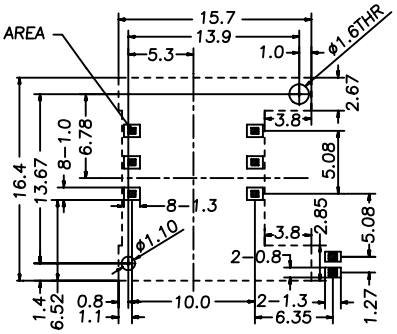
RECOMMEND P.C.B. LAYOUT

*Specification:
Insulation material: Thermoplastic,UL 94V−0
Insulation Resistance: 1000 M Ohms Min.
Contact Resistance: 50 M Ohms Max.;
Operatimg Temperature: −40°C to +85°C;
Durability: 10,000 Cycles min.

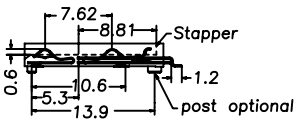
SCU-W1026PB-06







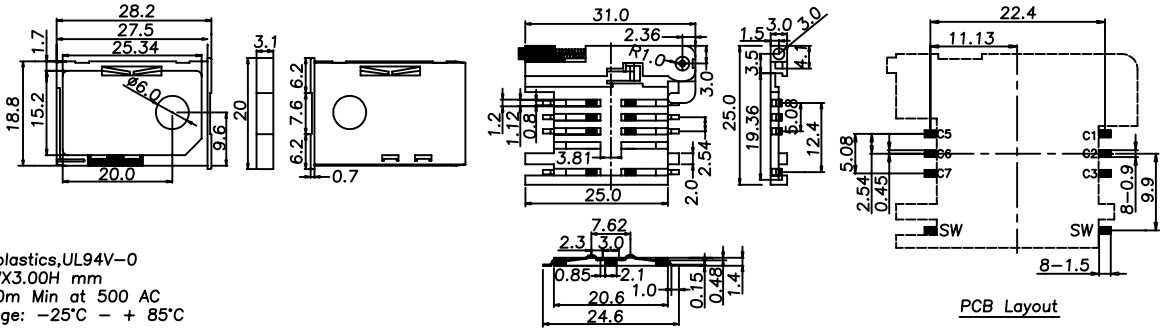
RECOMMEND P.C.B. LAYOUT



*Specification:
Insulation material: Thermoplastic,UL 94V−0
Insulation Resistance: 1000 M Ohms 500VDC
Contact Resistance: 50 M Ohms Max.;
Operatimg Temperature: −40°C to +85°C;
Durability: 10,000 Cycles min.

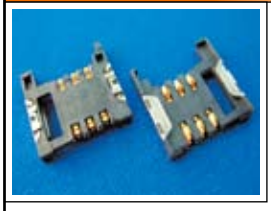
Card slot connectors
卡 槽 類 連 接 器

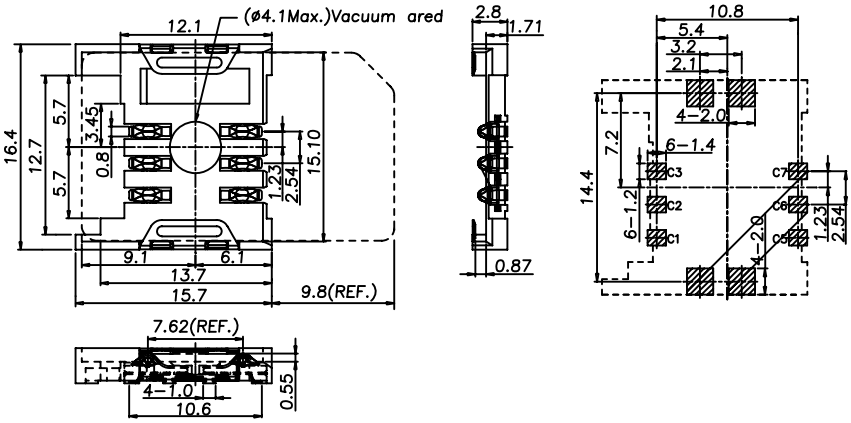
SCE-W2231-06



Specifications
Insulation material:Thermoplastics,UL94V–0
Dielectric : 31.00LX25.00WX3.00H mm
Insulation resistance: 1000m Min at 500 AC
Operating Temperature range: –25°C – + 85°C
Durability: 10,000 Cycles

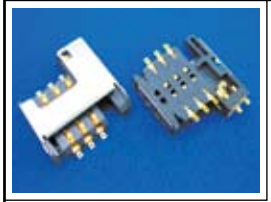
SCU-W1028X-06

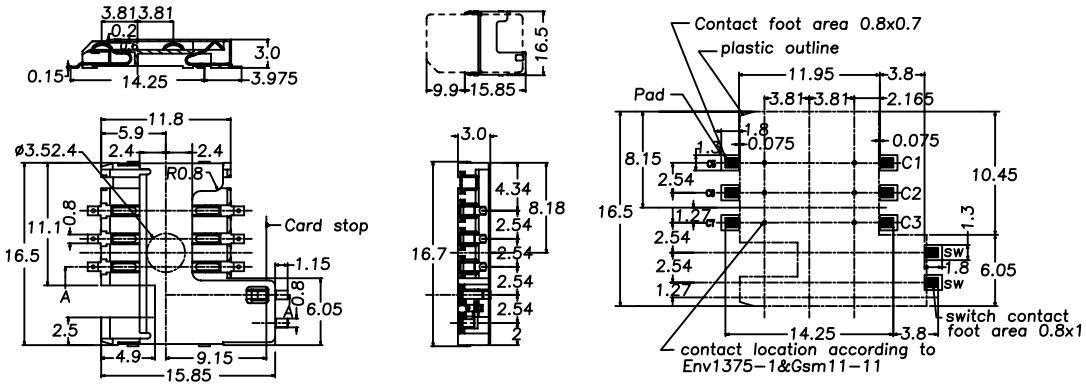




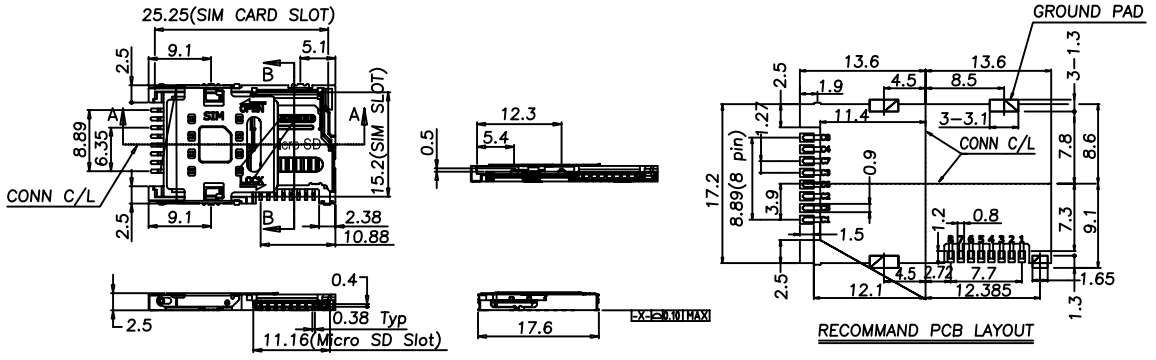
Specifications
Insulation material:Thermoplastics,UL94V–0
Dielectric : 15.70LX16.40WX2.80H mm
Insulation resistance: 1000m Min at 500 AC
Operating Temperature range: –40°C – + 85°C
Durability: 10,000 Cycles

SCT-W1230XB-06



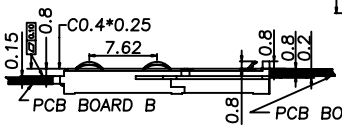


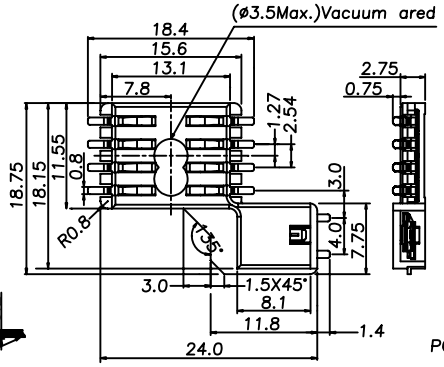
SCTF-W16EH2-0808

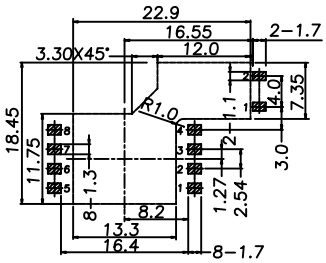


Card slot connectors
卡 槽 類 連 接 器

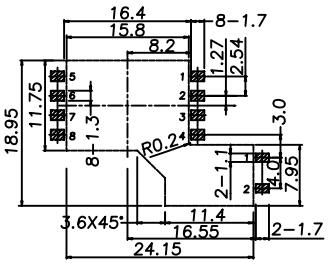
SCZ-W1827XB-08







PCB Layout Refernce A (Frontispiece)



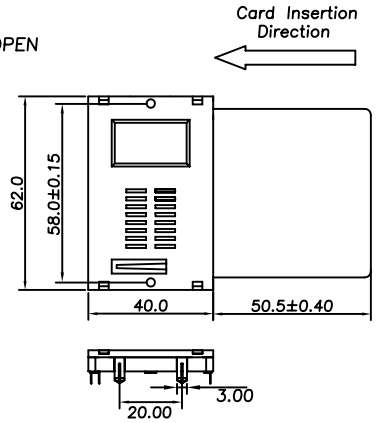
PCB Layout Refernce B (Inverse)

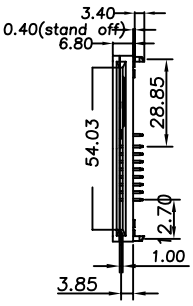
Smart Card Connectors

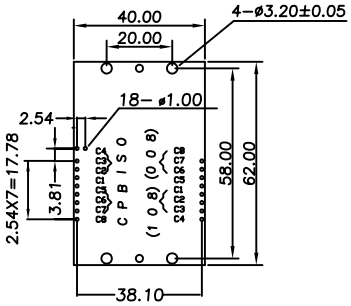
SCF-R68x-08

x= A/CLOSED, B/OPEN

SPECIFICATION:
Contact Material: Phosphor Bronze(SPOON)
Insulator Material: P.B.T, UL 94V-0
Current rating: 1A DC MAX
Insulation resistance: 1000 Megaohms MIN
Contact resistance: 100 milliohms MAX
Withstand voltage: AC 1000V RMS (1MIN)
Rated voltage: 50V DC Max
Temperature Range: -40°C~+60°C



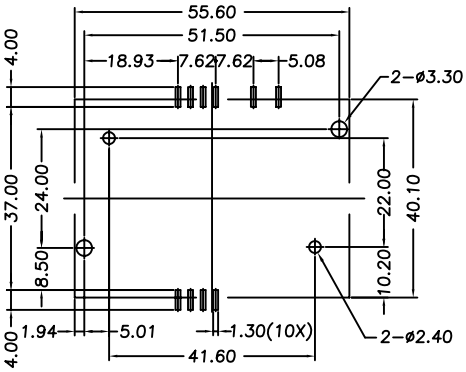




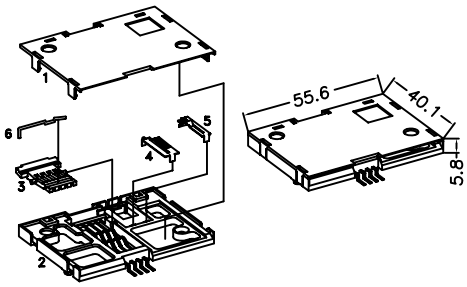
Through Hole Mounting

SCL-W58B-08

SPECIFICATION
BASE : PA-9T.UL94V-0
COVER : PA-9T.UL94V-0
CLUTCH : PA46.UL94V-0
TERMINAL : COPPER ALLOY
VOLTAGE RATING : 50V DC MAX
CURRENT RATING : 0.5A MAX
OPERATING TEMPERATURE : -20°C ~ +80°C
INSULATION RESISTANCE: 1000 MΩ Min
CONTACT RESISTANCE: 100 mΩ Max

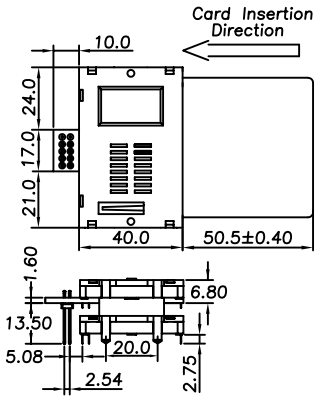


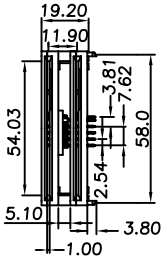
LAYOUTTolerance ±0.05

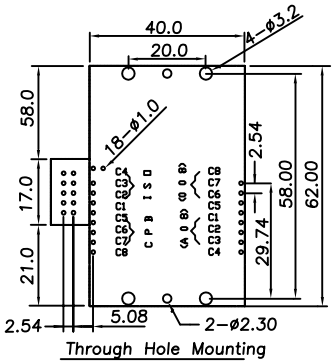


SCFB1-RA-08

SPECIFICATION:
Contact Material: Phosphor Bronze(SPOON)
Insulator Material: P.B.T, UL 94V-0
Current rating: 1A DC MAX
Insulation resistance: 1000 Megaohms MIN
Contact resistance: 100 milliohms MAX
Withstand voltage: AC 1000V RMS (1MIN)
Rated voltage: 50V DC Max
Temperature Range: -40°C~+60°C





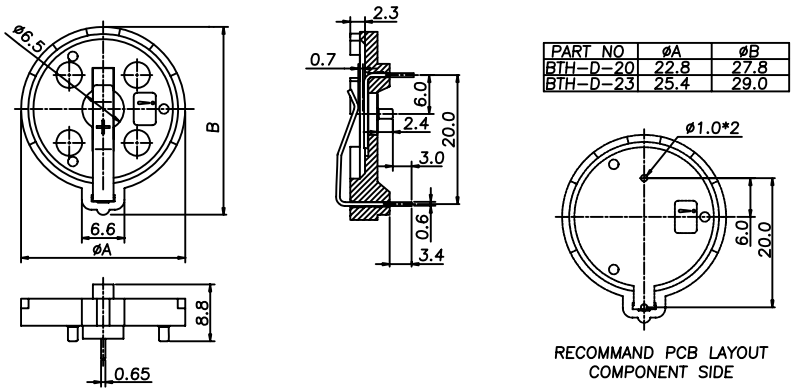


Through Hole Mounting

Battery Holder Connectors

BTH-D-xx

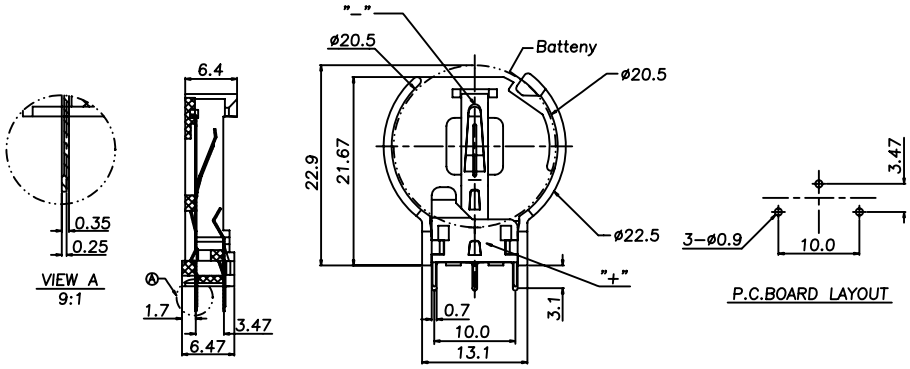
SPECIFICATION:
Housing–PBT 30%GF UL94V–0
Contact–Phosphor Bronze C5191R–H T=0.6mm



PART NO	øA	øB
BTH–D–20	22.8	27.8
BTH–D–23	25.4	29.0

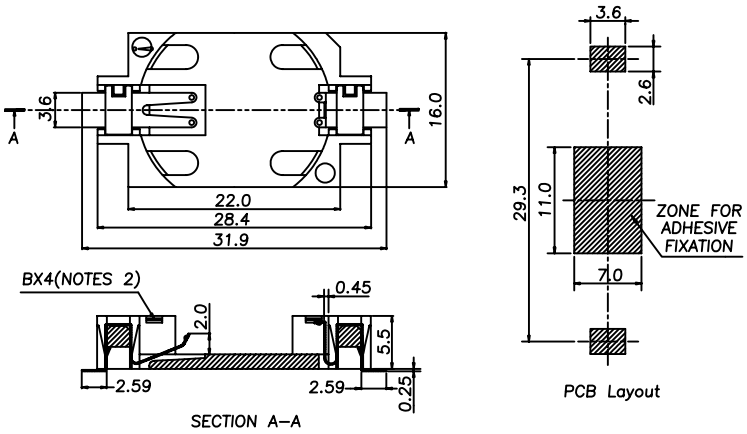
BTH-U-20

SPECIFICATION:
Body:FR–Nylon with 30%GF Glass Fiber
Flammability UL 94V–0 Rated.
Contact:Phosphor Bronze.
Application For 3V Lithium Battery.
Dielectric Withstending Voltage:500 VDC
Operation Temperature:–55°C ~ 105°C



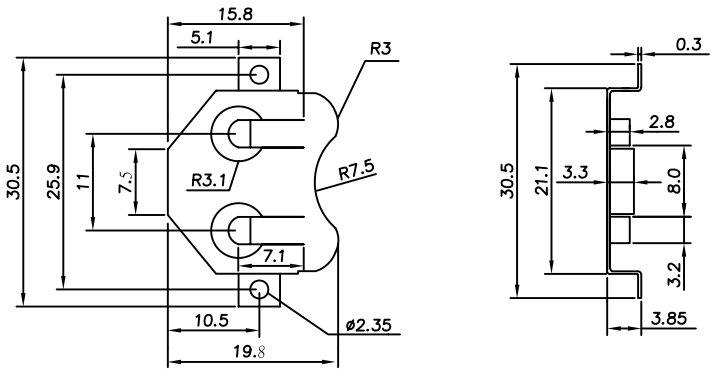
BTH-V-20

NOTES
Housing–LCP 30%GF UL94V–0
Contact–Phosphor Bronze C5191R–H.



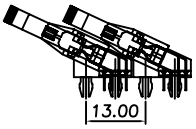
BTH-W39-20

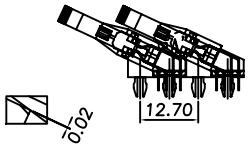
SPECIFICATION
MATERIAL:0.3mm PHOSPHORUS
BRONZE, NICKEL PLATE

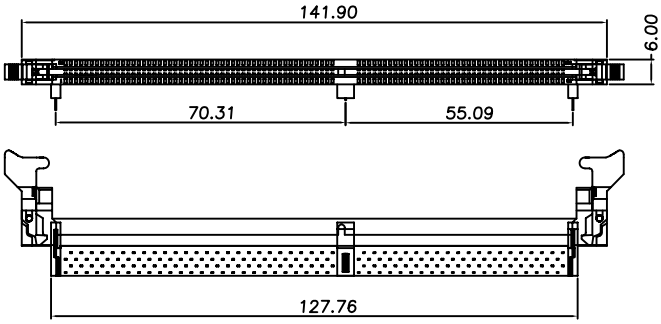


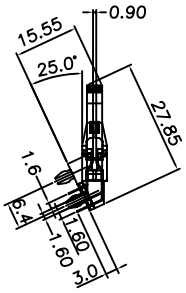
Dimm Socket Connectors

DIM-AVZ-184

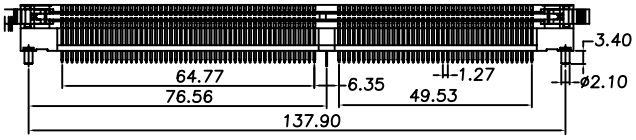


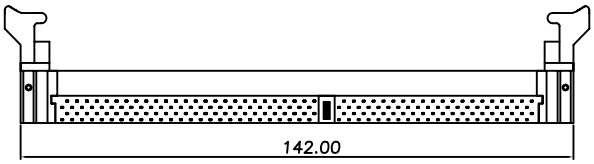


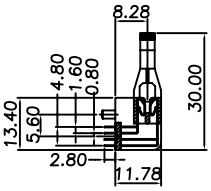


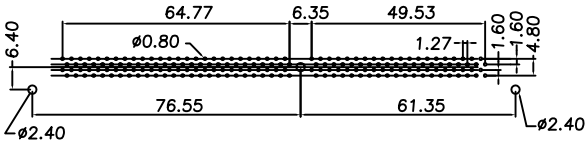


DIM-R11-184

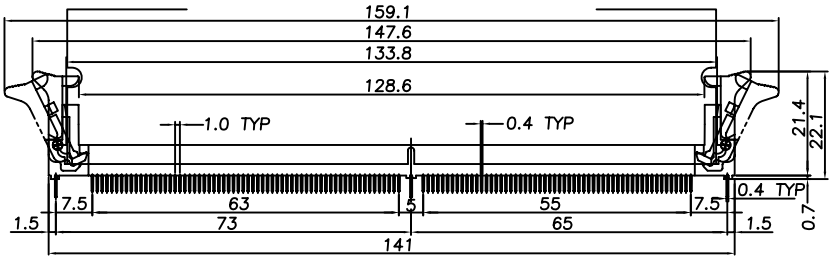


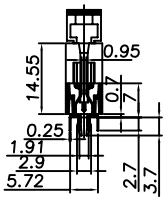




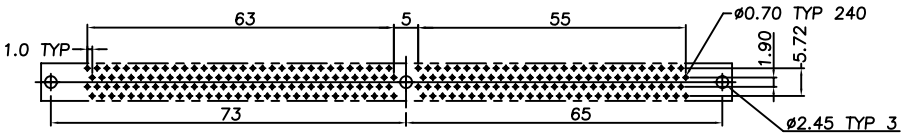


DIM1-DZ-240



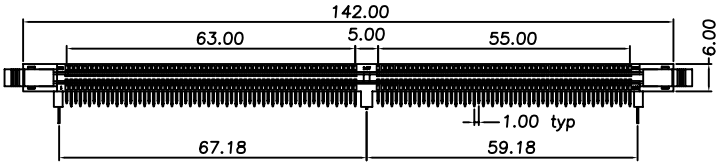


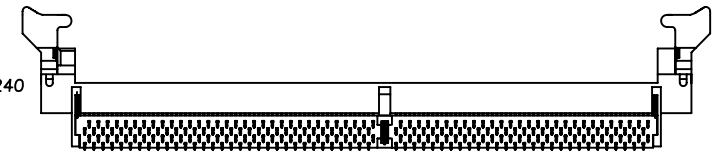
SECT A–A

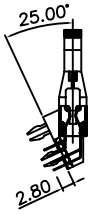


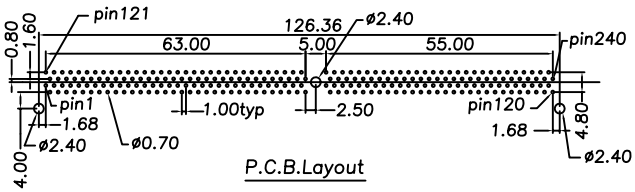
P.C.B HOLE LAYOUT

DIM1-A-240



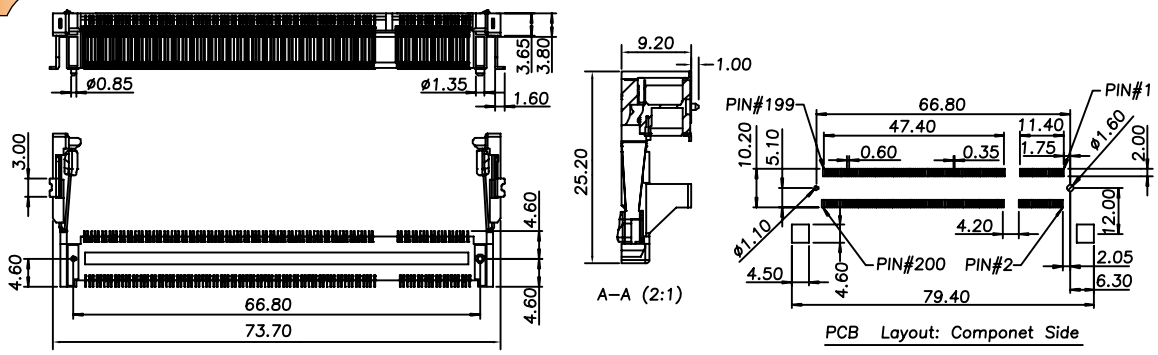




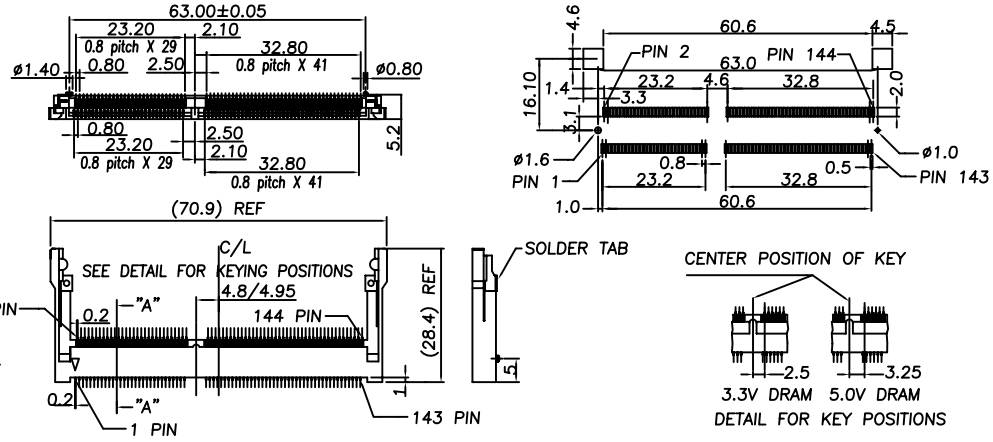


P.C.B.Layout

SDM6-W92V25-40A6



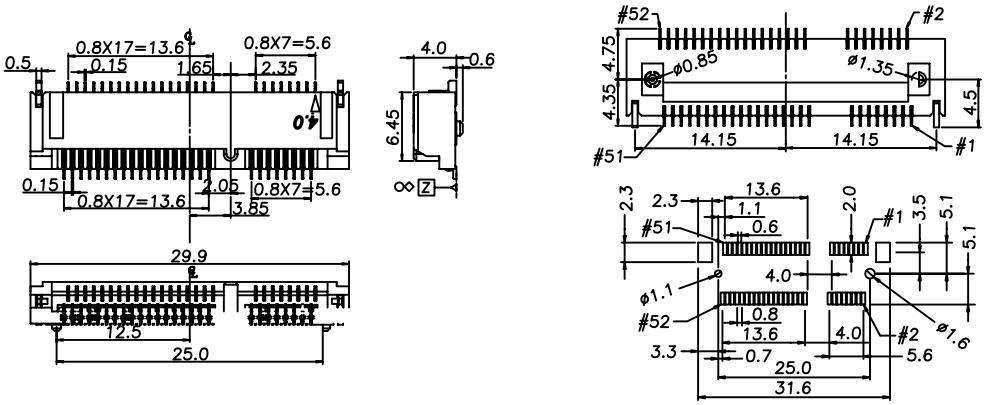
SDM8-W52V33-6084



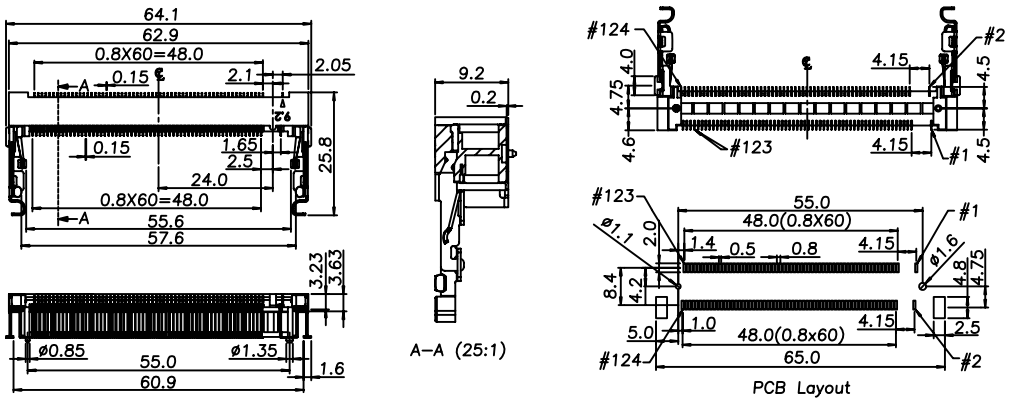
MATERIAL
HOUSING: LCP / UL94V-0
COLOR: NATURAL=3.3V DRAM, BLACK=X.XV DRAM.
CONTACT: PHOS-BRONZE(t=0.2)
SOLDER TAB: PHOS-BRONZE(t=0.3)

Mini PCI Connectors

MPCI-W40-052



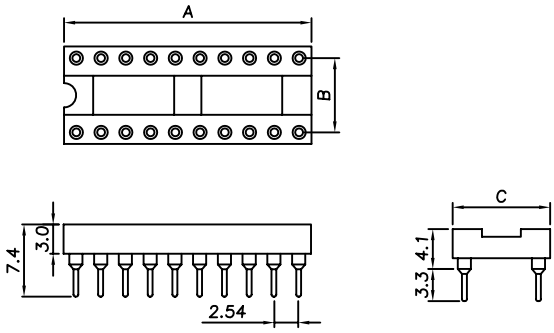
MPCI-W92-124



IC Socket Connectors

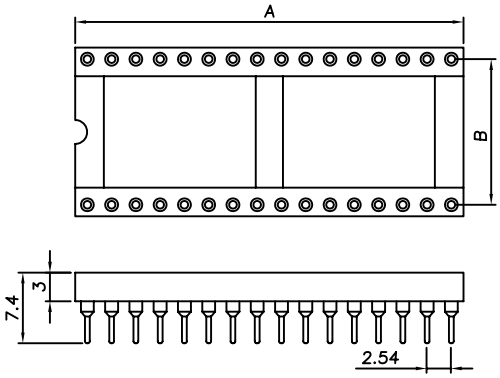
SIC-D03-xx

CIRCUITS	DIM.A	DIM.B	DIM.C	SPACE
6	7.62	7.62	10.16	03
8	10.16	7.62	10.16	
14	17.78	7.62	10.16	
16	20.32	7.62	10.16	
18	22.86	7.62	10.16	
20	25.40	7.62	10.16	
22	27.94	7.62	10.16	
24	30.48	7.62	10.16	
28	35.56	7.62	10.16	



* Insulator: IC Socket=PBT (UL94V-0)
* Current Rating: 1A
* Contact Resistance : 10 Milliohm
* Insulator Resistance : 5000 Mege Ohm at 500 VDC
* Dielectric Strength : 1000 VRMS Min
* Rated Voltage : 100 VRMS / 150VDC
* Temperature: – 55°C TO + 125°C

SIC-D06-xx

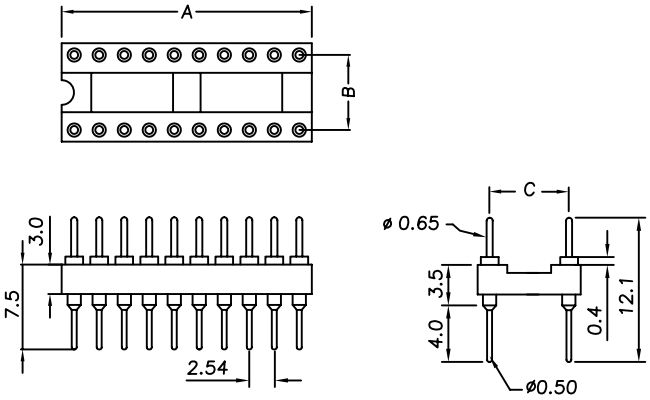


CIRCUITS	DIM.A	DIM.B	DIM.C	SPACE
24	30.48	15.24	17.78	06
28	35.56	15.24	17.78	
32	40.64	15.24	17.78	
40	50.80	15.24	17.78	
42	53.34	15.24	17.78	
48	60.96	15.24	17.78	

* Insulator: IC Socket=PBT (UL94V-0)
* Current Rating: 1A
* Contact Resistance : 10 Milliohm
* Insulator Resistance : 5000 Mege Ohm at 500 VDC
* Dielectric Strength : 1000 VRMS Min
* Rated Voltage : 100 VRMS / 150VDC
* Temperature: – 55°C TO + 125°C

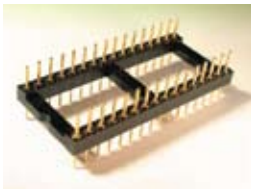
PIC-D03G-xx

SPACE 0.3"	DIM A	DIM B	DIM C
20	25.40	15.24	17.78
24	30.48	15.24	17.78
28	35.56	15.24	17.78
32	40.64	15.24	17.78
36	45.66	15.24	17.78
40	50.80	15.24	17.78
42	53.34	15.24	17.78
48	60.96	15.24	17.78

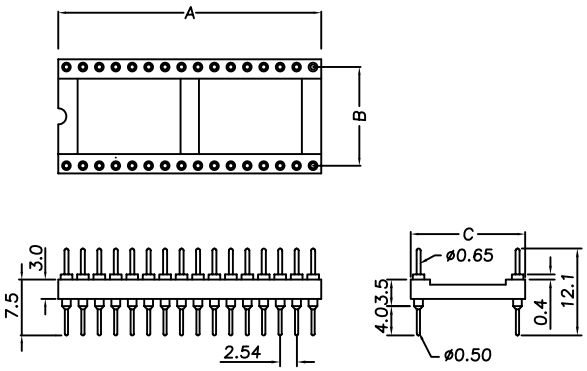


* INSULATOR: GLASS FILLED POLYESTER,UL 94V-0
* INSERTION FORCE: AVERAGE 500 GR
* EXTRACTION TEST: AVERAGE 159 GR
* RESIST TO SOLDERING HEAT: MAX. 260°C, 5 SEC.
* CONTACT RESIST: < = 100M OHMS
* INSULATOR RESIST : > = 5000M OHMS
* DIELECTRIC WITHSTANDING : 600 VRMS
* TEMPERATURE: – 55°C TO + 125°C

PIC-D06G-xxx



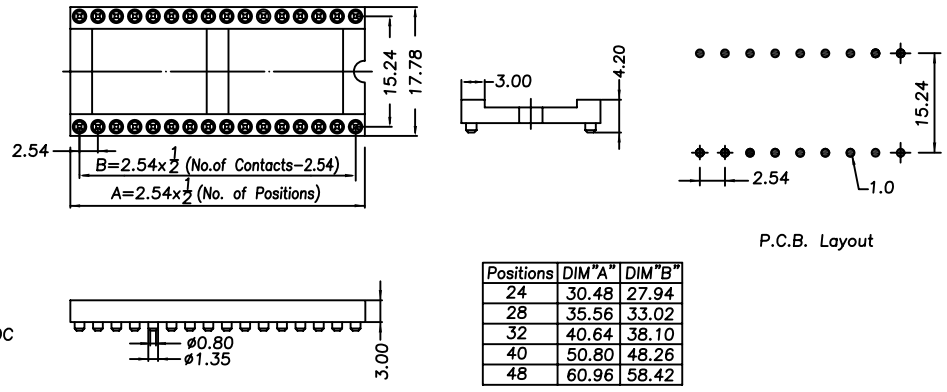
SPACE 0.3"	DIM A	DIM B	DIM C
06	7.62	7.62	10.16
08	10.16	7.62	10.16
10	12.70	7.62	10.16
14	17.78	7.62	10.16
16	20.32	7.62	10.16
18	22.86	7.62	10.16
20	25.40	7.62	10.16
22	27.94	7.62	10.16
24	30.48	7.62	10.16
28	35.56	7.62	10.16



* INSULATOR: GLASS FILLED POLYESTER,UL 94V-0
* INSERTION FORCE: AVERAGE 500 GR
* EXTRACTION TEST: AVERAGE 159 GR
* RESIST TO SOLDERING HEAT: MAX. 260°C, 5 SEC.
* CONTACT RESIST: < = 100M OHMS
* INSULATOR RESIST : > = 5000M OHMS
* DIELECTRIC WITHSTANDING : 600 VRMS
* TEMPERATURE: – 55°C TO + 125°C

Socket type connectors
腳 座 類 連 接 器

SICP-V06-40

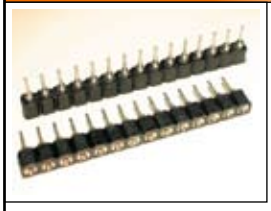


P.C.B. Layout

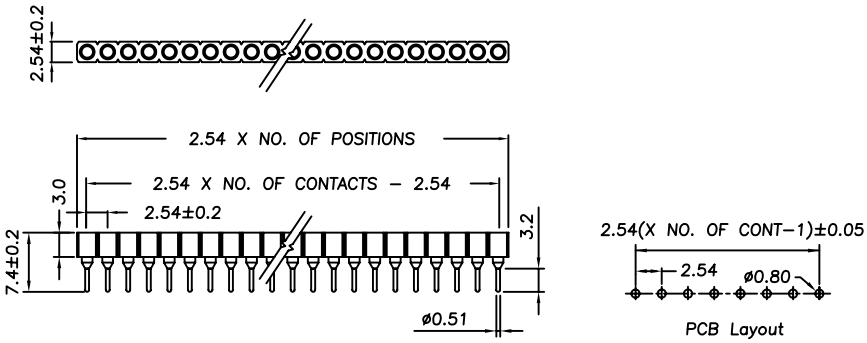
Positions	DIM"A"	DIM"B"
24	30.48	27.94
28	35.56	33.02
32	40.64	38.10
40	50.80	48.26
48	60.96	58.42

* Insulator: IC Socket=PPS
* Resist to Soldering Heat: Max. 120~130°C, 5 Sec.
* Current Rating: 1A
* Operating Humidity Range: Annual mean 75%
* Contact Resistance : 10 Milliohm
* Insulator Resistance : 5000 Mege Ohm at 500 VDC
* Dielectric Strength : 1000 VRMS Min
* Rated Voltage : 100 VRMS / 150VDC
* Temperature: – 55°C TO + 240°C

SS-D-1Xxx



MATERIAL & FINISH
* Sleeve: Brass
* Insulator: PPS

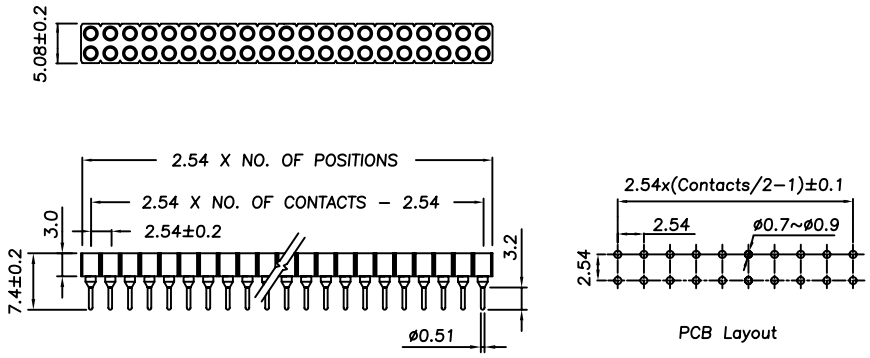


PCB Layout

* Current Rating: 1A
* Operating Humidity Range: Annual mean 75%
* Contact Resistance : 10 Milliohm
* Insulator Resistance : 5000 Mege Ohm at 500 VDC
* Dielectric Strength : 1000 VRMS Min
* Rated Voltage : 100 VRMS / 150VDC
* Temperature: – 55°C TO + 240°C

SS-D-2Xxx

MATERIAL & FINISH
* Sleeve: Brass
* Insulator: PPS

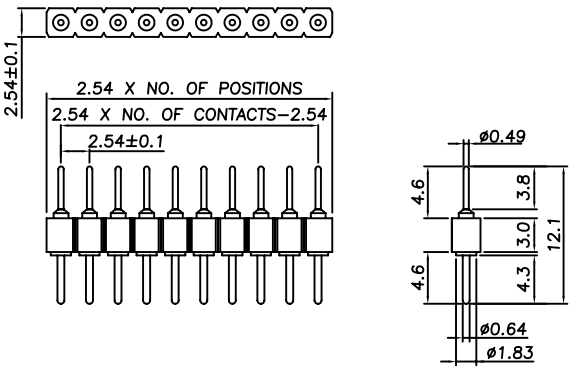


PCB Layout

* Current Rating: 1A
* Operating Humidity Range: Annual mean 75%
* Contact Resistance : 10 Milliohm
* Insulator Resistance : 5000 Mege Ohm at 500 VDC
* Dielectric Strength : 1000 VRMS Min
* Rated Voltage : 100 VRMS / 150VDC
* Temperature: – 55°C TO + 240°C

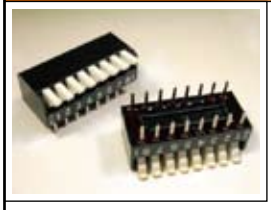
SP12-DG-1Xxx

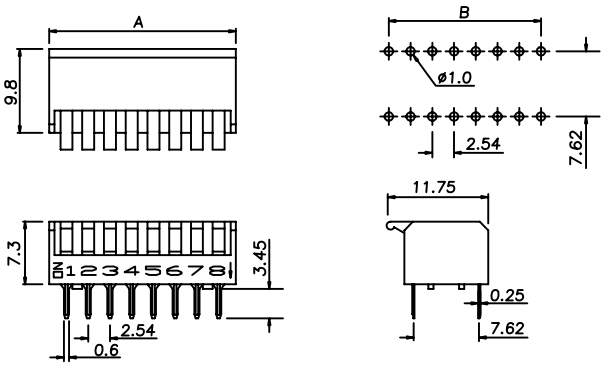
SPECIFICATIONS
CURRENT RATING: 1 Amp
INSULATOR RESISTANCE: 5000 MEGOHMS MIN.
500V DC FOR 1 MINUTES.
CONTACT RESISTANCE: 20 M OHM MAX.
DIELECTRIC WITHSTANDING: AC 500 V FOR 1 MINUTES.
OPERATING TEMPERATURE: –40°C ~ 240°C
CONTACT MATERIAL: BRASS
INSULATOR MATERIAL: PPS UL94V–0



Switch Connectors

SW-PBK-xx



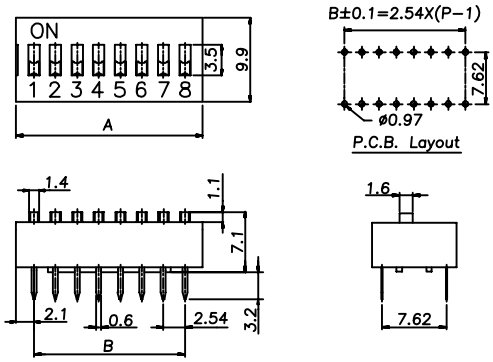


Contact Arrangement

Switches shown in open positicon

Positicon	DIM A	DIM B
2	6.60	2.54
3	9.14	5.08
4	11.68	7.62
5	14.22	10.16
6	16.76	12.70
7	19.30	15.24
8	21.80	17.78
9	24.38	20.32
10	26.92	22.86
12	32.00	27.94

SW-S-xx



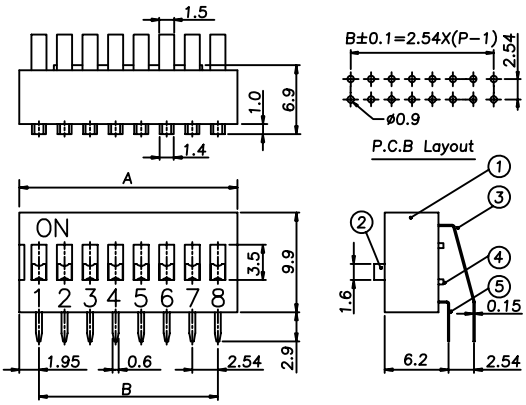
NOTE:1.ALL DIMENSIONS ARE IN MILLIMETERS.BRACKETED ARE IN INCHES.
2.CENERAL TOLERANCES:10mm OVER ±0.20mm
3.MATERIAL:SEE PAGE 3 OF 3

SW−S−12	12	31.84	27.94
SW−S−10	10	26.76	22.86
SW−S−09	9	24.22	20.32
SW−S−08	8	21.68	17.78
SW−S−07	7	19.14	15.24
SW−S−06	6	16.60	12.70
SW−S−05	5	14.06	10.16
SW−S−04	4	11.52	7.62
SW−S−03	3	8.98	5.08
SW−S−02	2	6.44	2.54
PROD. NO.	NO. OF POS.	DIM.A	DIM.B

SCHEMATIC(TYP.)

(2,3,4,5,6,7,8,9,10,12 POS AVAIL)

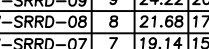
SW-SRRD-xx



NOTE:1.ALL DIMENSIONS ARE IN MILLIMETERS.BRACKETED DIMENSIONS ARE IN INCHES.
2.GENERAL TOLERANCES:10mm OVER ±0.20mm
10mm BELOW ±0.10mm

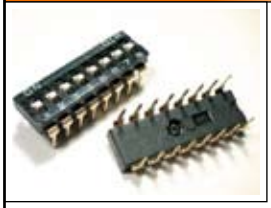
SW−SRRD−12	12	31.84	27.94
SW−SRRD−10	10	26.76	22.86
SW−SRRD−09	9	24.22	20.32
SW−SRRD−08	8	21.68	17.78
SW−SRRD−07	7	19.14	15.24
SW−SRRD−06	6	16.60	12.70
SW−SRRD−05	5	14.06	10.16
SW−SRRD−04	4	11.52	7.62
SW−SRRD−03	3	8.98	5.08
SW−SRRD−02	2	6.44	2.54
PROD. NO.	NO. OF POS.	DIM.A	DIM.B

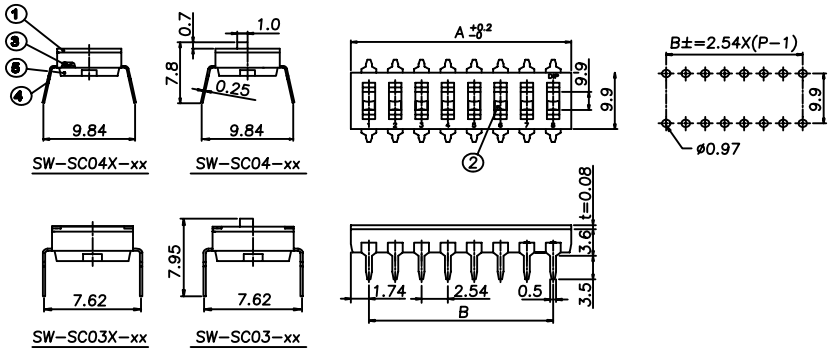
SCHEMATIC(TYP.)



(2,3,4,5,6,7,8,9,10,12 POS AVAIL)

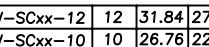
SW-SCxx-xx





SW−SCxx−12	12	31.84	27.94
SW−SCxx−10	10	26.76	22.86
SW−SCxx−09	9	24.22	20.32
SW−SCxx−08	8	21.68	17.78
SW−SCxx−07	7	19.14	15.24
SW−SCxx−06	6	16.60	12.70
SW−SCxx−05	5	14.06	10.16
SW−SCxx−04	4	11.52	7.62
SW−SCxx−03	3	8.98	5.08
SW−SCxx−02	2	6.44	2.54
SW−SCxx−01	1	3.48	——
PROD. NO.	NO. OF POS.	DIM.A	DIM.B

SCHEMATIC(TYP.)



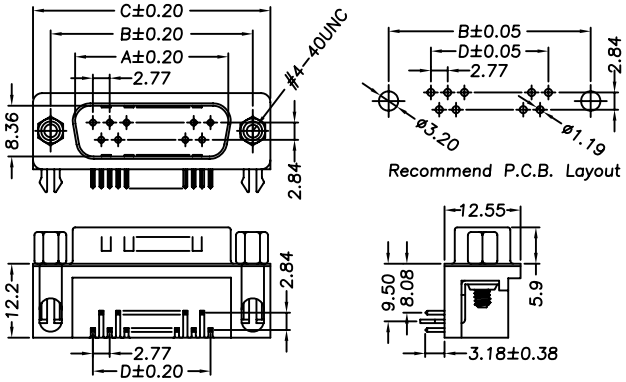
(2,3,4,5,6,7,8,9,10,12 POS AVAIL)

D-Sub Connectors

DR-PG-xx

Material:
Insulator: PBT+30% Glass Fiber(Meet UL94V-0).
Contact: Copper Alloy.
Contact Plated: Selective Gold over Nickel Plated.
Shell: Steel with Nickel or Tin or Zinc Plated.
Specification:
Current Rating: 5 Amps.
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance: 1000MΩ Min. at DC 500V.
Contact Resistance: 15mΩ Max..
Operating Temperature: -40°C~+105°C.

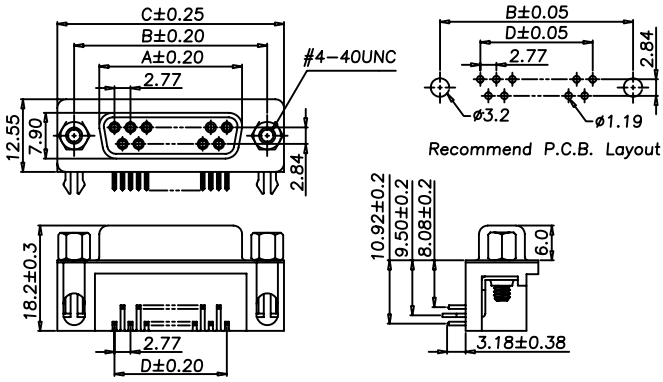
No. of Contacts	Dim. A	Dim. B	Dim. C	Dim. D
DR-PG-09	16.92	24.99	30.81	11.08
DR-PG-15	25.25	33.32	39.14	19.39
DR-PG-25	38.96	47.04	53.04	33.24
DR-PG-37	55.42	63.50	69.32	49.86



DR-SG-xx

Material:
Insulator: PBT+30% Glass Fiber(Meet UL94V-0).
Contact: Copper Alloy.
Contact Plated: Selective Gold over Nickel Plated.
Shell: Steel with Nickel or Tin or Zinc Plated.
Specification:
Current Rating: 5 Amps.
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance: 1000MΩ Min. at DC 500V.
Contact Resistance: 15mΩ Max..
Operating Temperature: -40°C~+105°C.

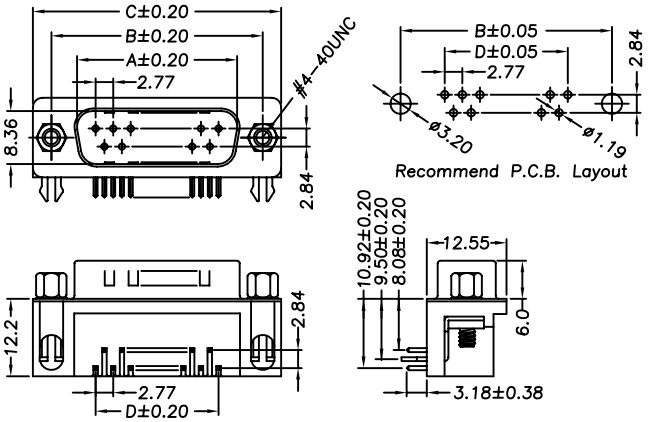
No. of Contacts	Dim. A	Dim. B	Dim. C	Dim. D
DR-SG-09	16.33	24.99	30.81	11.08
DR-SG-15	24.66	33.32	39.14	19.39
DR-SG-25	38.38	47.04	53.04	33.24
DR-SG-37	54.84	63.50	69.32	49.86



DR-PGNJ-xx

Material:
Insulator: PBT+30% Glass Fiber(Meet UL94V-0).
Contact: Copper Alloy.
Contact Plated: Selective Gold over Nickel Plated.
Shell: Steel with Nickel or Tin or Zinc Plated.
Specification:
Current Rating: 5 Amps.
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance: 1000MΩ Min. at DC 500V.
Contact Resistance: 15mΩ Max..
Operating Temperature: -40°C~+105°C.

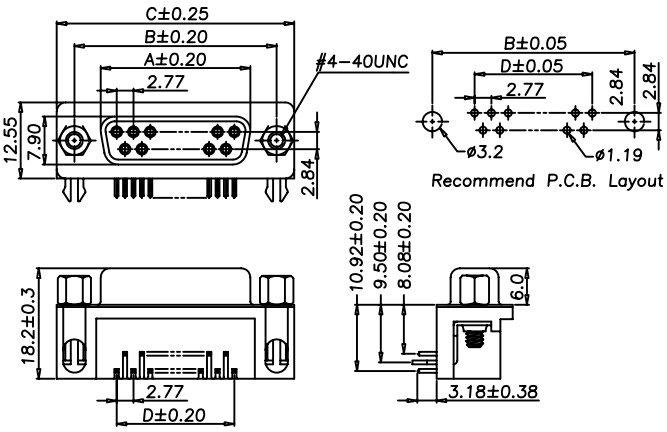
No. of Contacts	Dim. A	Dim. B	Dim. C	Dim. D
DR-PGNJ-09	16.92	24.99	30.81	11.08
DR-PGNJ-15	25.25	33.32	39.14	19.39
DR-PGNJ-25	38.96	47.04	53.04	33.24
DR-PGNJ-37	54.42	63.50	69.32	49.86



DR-SGNJ-xx

Material:
Insulator: PBT+30% Glass Fiber(Meet UL94V-0).
Contact: Copper Alloy.
Contact Plated: Selective Gold over Nickel Plated.
Shell: Steel with Nickel or Tin or Zinc Plated.
Specification:
Current Rating: 5 Amps.
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance: 1000MΩ Min. at DC 500V.
Contact Resistance: 15mΩ Max..
Operating Temperature: -40°C~+105°C.

No. of Contacts	Dim. A	Dim. B	Dim. C	Dim. D
DR-SGNJ-09	16.33	24.99	30.81	11.08
DR-SGNJ-15	24.66	33.32	39.14	19.39
DR-SGNJ-25	38.38	47.04	53.04	33.24
DR-SGNJ-37	54.84	63.50	69.32	49.86

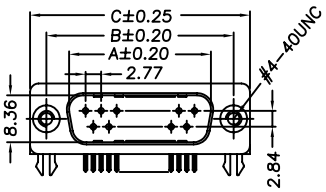


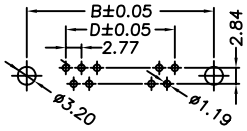
Rectangular I/O connectors
方 型 類 連 接 器

DR-PGNH-xx

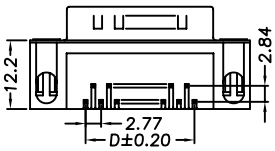
Material:
Insulator: PBT+30% Glass Fiber(Meet UL94V-0).
Contact: Copper Alloy.
Contact Plated: Selective Gold over Nickel Plated.
Shell: Steel with Nickel or Tin or Zinc Plated.

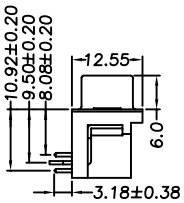
Specification:
Current Rating: 5 Amps.
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance: 1000MΩ Min. at DC 500V.
Contact Resistance: 15mΩ Max..
Operating Temperature: -40°C~+105°C.



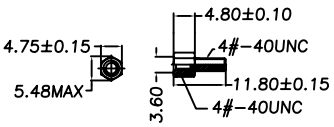


Recommend P.C.B. Layout





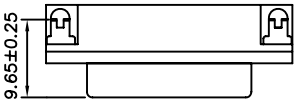
No. of Contacts	Dim. A	Dim. B	Dim. C	Dim. D
DR-PGNH-09	16.92	24.99	30.81	11.08
DR-PGNH-15	25.25	33.32	39.14	19.39
DR-PGNH-25	38.96	47.04	53.04	33.24
DR-PGNH-37	55.42	63.50	69.32	49.86

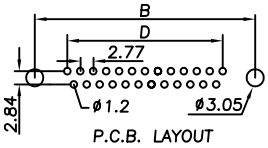


DR-SGNH-xx

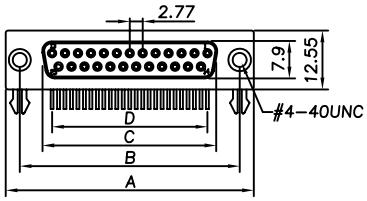
Material:
Insulator: PBT+30% Glass Fiber(Meet UL94V-0).
Contact: Copper Alloy.
Contact Plated: Selective Gold over Nickel Plated.
Shell: Steel with Nickel or Tin or Zinc Plated.

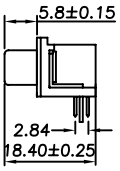
Specification:
Current Rating: 5 Amps.
Withstanding Voltage: AC 500V for 1 Minute.
Insulation Resistance: 1000MΩ Min. at DC 500V.
Contact Resistance: 15mΩ Max..
Operating Temperature: -40°C~+105°C.



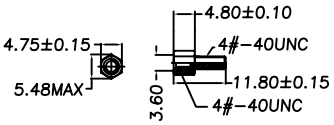


P.C.B. LAYOUT





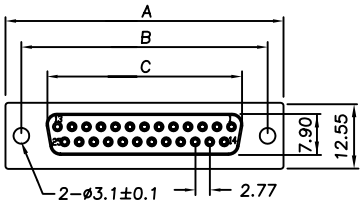
No. of Contacts	Dim. C	Dim. B	Dim. A	Dim. D
DR-SGNH-09	16.33	24.99	30.81	11.08
DR-SGNH-15	24.66	33.32	39.14	19.39
DR-SGNH-25	38.38	47.04	53.04	33.24
DR-SGNH-37	54.84	63.50	69.32	49.86

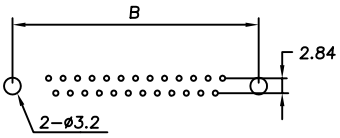


DD-SGZJ-xx

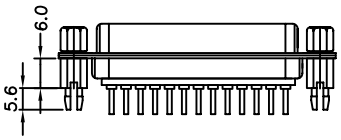
Material:
Insulator: High temperature thermoplastic with g.f,UL94v-0
Contact: Copper alloy,t=0.20mm
Shell: Spcc,t=0.30mm

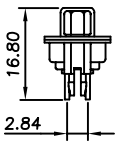
Specification:
Current rating: 1 A Max.
Dielectric withstanding voltage: 750 V(ac) for 1 min.
Contact resistance: 30 mW Max.
Insulation resistance: 1000 MW Min.
Total mating force: 7.0 Kgf Max.
Total unmating force: 1.5 Kgf Min.
Temperature range: -55°C~85°C





PC BOARD LAYOUT





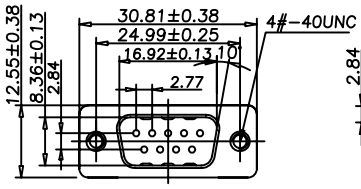
No. of Contacts	Dim. A	Dim. B	Dim. C
DD-SGZJ-09	30.81	24.99	16.33
DD-SGZJ-15	39.25	33.32	24.66
DD-SGZJ-25	53.04	47.04	38.38
DD-SGZJ-37	69.50	63.50	54.84

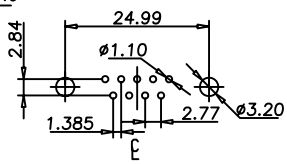
DCD11-PSZJ-09

SPECIFICATIONS
ELECTRICAL CHARACERISTICS:
Contact Current Rating:3 Amperes.
Dielectric Withstanding Voltage: AC 1000/60sec.r.m.s.
Insulation Resistance:500 Medohms Minimum.at DC 500V.
Contact Resistaance:25 Milliohms Maximum.
Operating Temperature:-55°C to+105°C.

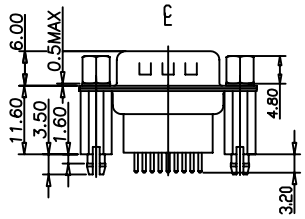
MECHANICAL CHARACTERISTICS:
Contact Insertion Force:341 g.Maximum.
Contact Separation Force:21 g.Minimum.
Grounding Screw Torque:3 Kg.Minimum.

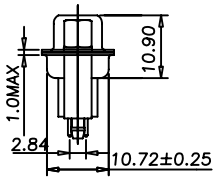
MATERIALS:
Contacts:Brass.
Insulator: PBT UL 94V-0 Rated.
Shell:Cold Roller Steel.
Grounding Screw Torque:Brass
FINISHES:
Contact:Gold Flash.
Shell:Nickel Plated.





RECOMMENDED P.C.B. LAYOUT

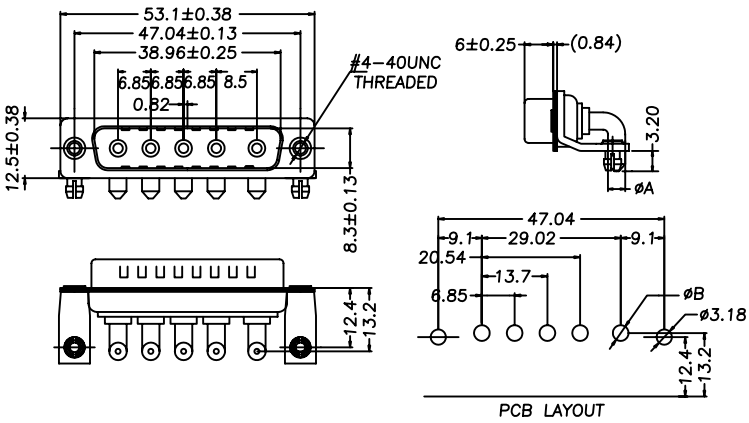




DWR-PxxZN-05W5

SPECIFICATIONS
Insulator : Glass filled polyester UL 94V-0
High power contact current rating : 20 Amps.
High power contact resistance : <2.7mΩ
Dielectric withstanding voltage : 1000VAC for one minute.
Insulation resistance : >5000MΩ
Connector mating and unmating force : 17.0kgf max.
Durability : 100 cycles.
Operating temperature : -55°C~+125°C

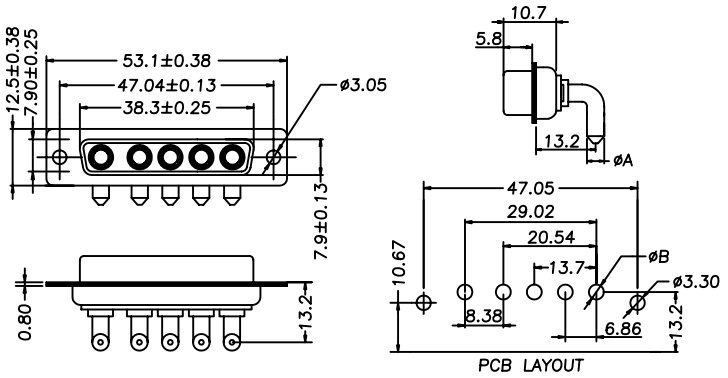
PART NO.	Current Rating	Dimension ø A	Dimension ø B
DWR-P40ZN-05W5	40 AMPS	ø3.75	ø4.20
DWR-P20ZN-05W5	20 AMPS	ø2.8	ø3.28
DWR-P10ZN-05W5	10 AMPS	ø1.7	ø2.20



DWR-Sxx-05W5

SPECIFICATIONS
Insulator : Glass filled polyester UL 94V-0
High power contact current rating : 20 Amps.
High power contact resistance : <2.7mΩ
Dielectric withstanding voltage : 1000VAC for one minute.
Insulation resistance : >5000MΩ
Connector mating and unmating force : 17.0kgf max.
Durability : 100 cycles.
Operating temperature : -55°C~+125°C

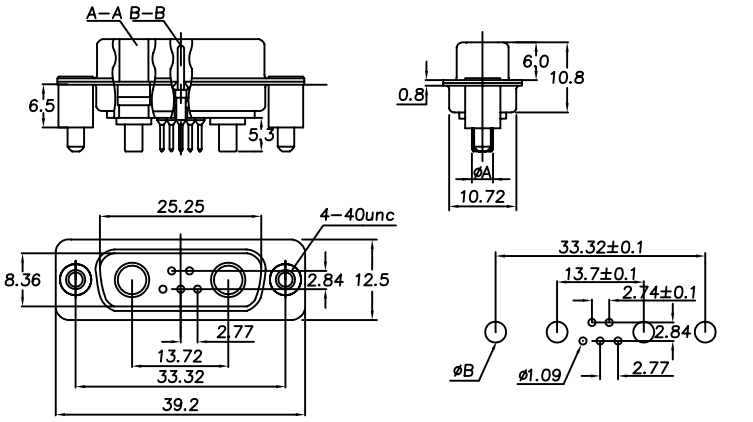
PART NO.	Current Rating	Dimension ø A	Dimension ø B
DWR-S40-05W5	40 AMPS	ø3.75	ø4.20
DWR-S20-05W5	20 AMPS	ø2.8	ø3.28
DWR-S10-05W5	10 AMPS	ø1.7	ø2.20



DWD-PxxZ-07W2

SPECIFICATIONS
Insulator : Glass filled polyester UL 94V-0
High power contact current rating : 20 Amps.
High power contact resistance : <2.7mΩ
Dielectric withstanding voltage : 1000VAC for one minute.
Insulation resistance : >5000MΩ
Connector mating and unmating force : 17.0kgf max.
Durability : 100 cycles.
Operating temperature : -55°C~+125°C

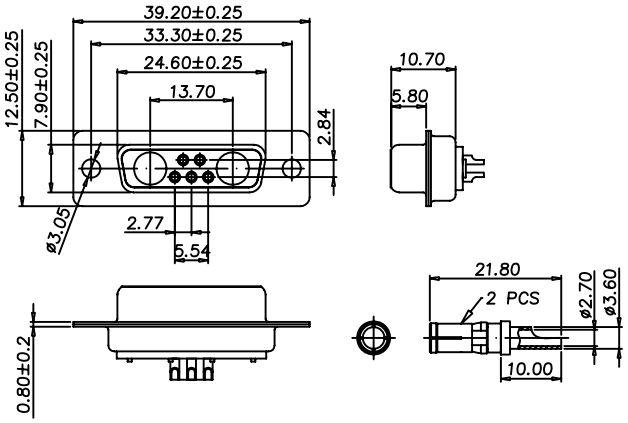
PART NO.	Current Rating	Dimension ø A	Dimension ø B
DWD-P40Z-07W2	40 AMPS	ø3.75	ø4.20
DWD-S20Z-07W2	20 AMPS	ø2.8	ø3.28
DWD-S10Z-07W2	10 AMPS	ø1.7	ø2.20



DWS-S20-07W2

SPECIFICATIONS
Insulator : PBT Thermoplastic 30%Glass filled polyester UL 94V-0
High power contact current rating : 20 Amps.
Signal contact resistance : <2.7mΩ MAX.
Dielectric withstanding voltage : 1000VAC for one minute.
Insulation resistance : >5000MΩ
Connector mating and unmating force : 17.0kgf max.
Durability : 100 cycles.
Operating temperature : -55°C~+125°C

DWS-S20-07W2
=20:20AMP

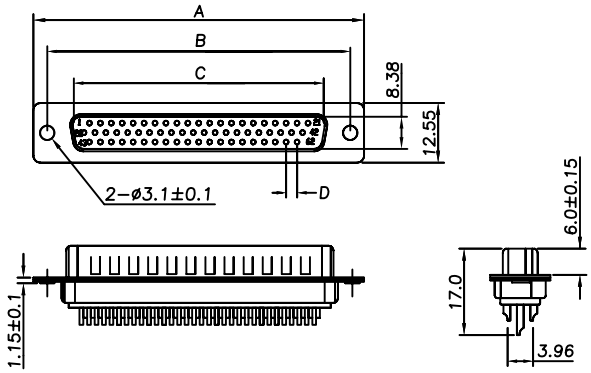


High Density Connector

HDS-PS-xx

Material:
Insulator: High temperature thermoplastic with g.f,UL94v-0
Contact: Copper alloy,t=0.20mm
Shell: Spcc,t=0.30mm

Specification:
Current rating: 1 A Max.
Dielectric withstandingvoltage: 750 V(ac) for 1 min.
Contact resistance: 30 mΩ Max.
Insulation resistance: 1000 MΩ Min.
Total mating force: 8.0 Kgf Max.
Total unmating force: 1.5 Kgf Min.
Temperature range: -55°C~85°C

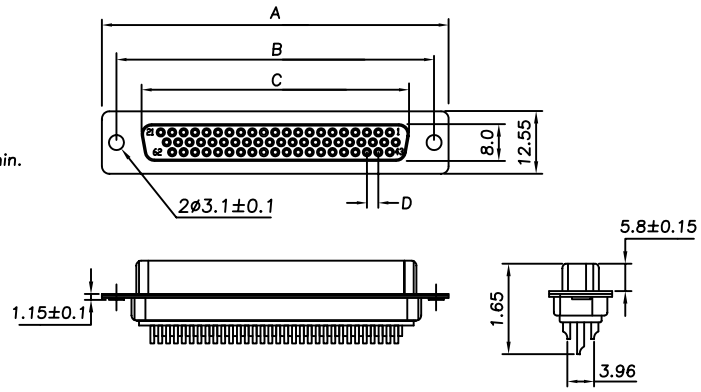


PART No.	A±0.25	B±0.20	C±0.20	D±0.05
HDS-PS-15	30.81	24.99	16.92	2.29
HDS-PS-26	39.25	33.32	25.25	2.29
HDS-PS-44	53.04	47.04	38.96	2.29
HDS-PS-62	69.50	63.50	55.42	2.41

HDS-SS-xx

Material:
Insulator: High temperature thermoplastic with g.f,UL94v-0
Contact: Copper alloy,t=0.20mm
Shell: Spcc,t=0.30mm

Specification:
Current rating: 1 A Max.
Dielectric withstandingvoltage: 750 V(ac) for 1 min.
Contact resistance: 30 mΩ Max.
Insulation resistance: 1000 MΩ Min.
Total mating force: 8.0 Kgf Max.
Total unmating force: 1.5 Kgf Min.
Temperature range: -55°C~85°C

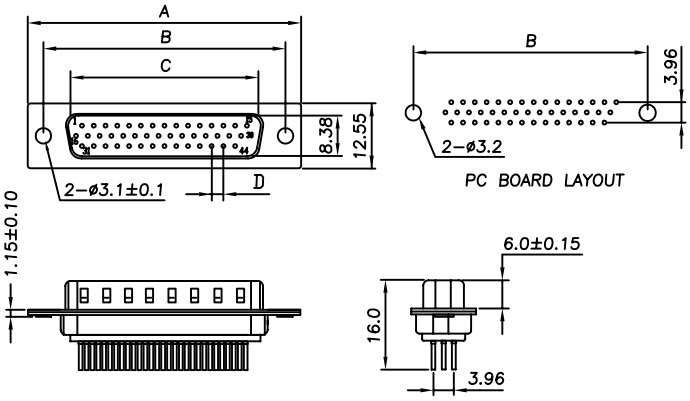


PART No.	A±0.25	B±0.20	C±0.20	D±0.05
HDS-SS-15	30.81	24.99	16.92	2.29
HDS-SS-26	39.25	33.32	25.25	2.29
HDS-SS-44	53.04	47.04	38.96	2.29
HDS-PS-62	69.50	63.50	55.42	2.41

HDD-PG-xx

Material:
Insulator: High temperature thermoplastic with g.f,UL94v-0
Contact: Copper alloy,t=0.20mm
Shell: Spcc,t=0.30mm

Specification:
Current rating: 1 A Max.
Dielectric withstanding voltage: 750 V(ac) for 1 min.
Contact resistance: 30 mΩ Max.
Insulation resistance: 1000 MΩ Min.
Total mating force: 8.0 Kgf Max.
Total unmating force: 1.5 Kgf Min.
Temperature range: -55°C~85°C

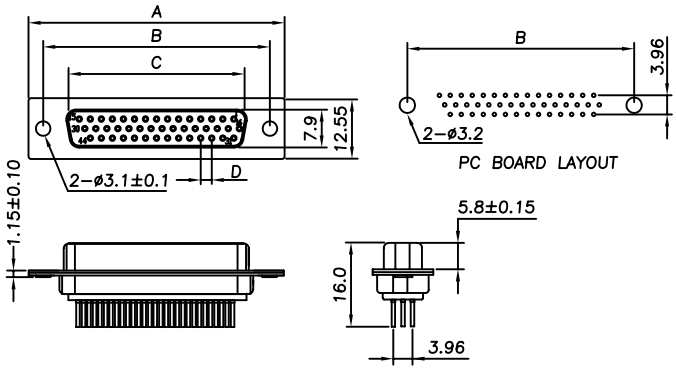


PART No.	A±0.25	B±0.20	C±0.20	D±0.05
HDD-PG-15	30.81	24.99	16.92	2.29
HDD-PG-26	39.25	33.32	25.25	2.29
HDD-PG-44	53.04	47.04	38.96	2.29
HDD-PG-62	69.50	63.50	55.42	2.41

HDD-SG-xx

Material:
Insulator: High temperature thermoplastic with g.f,UL94v-0
Contact: Copper alloy,t=0.20mm
Shell: Spcc,t=0.30mm

Specification:
Current rating: 1 A Max.
Dielectric withstanding voltage: 750 V(ac) for 1 min.
Contact resistance: 30 mΩ Max.
Insulation resistance: 1000 MΩ Min.
Total mating force: 8.0 Kgf Max.
Total unmating force: 1.5 Kgf Min.
Temperature range: -55°C~85°C



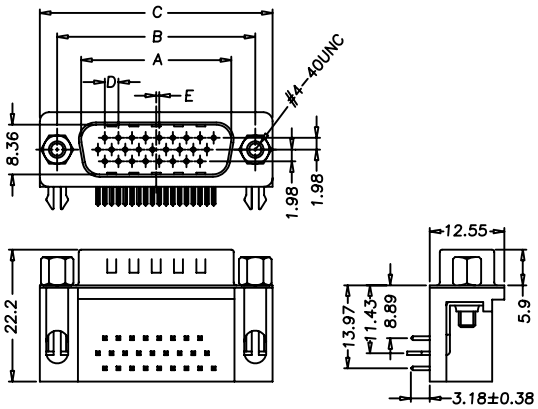
PART No.	A±0.25	B±0.20	C±0.20	D±0.05
HDD-SG-15	30.81	24.99	16.92	2.29
HDD-SG-26	39.25	33.32	25.25	2.29
HDD-SG-44	53.04	47.04	38.96	2.29
HDD-SG-62	69.50	63.50	55.42	2.41

Rectangular I/O connectors
方 型 類 連 接 器

HDR-PG-xx

Material:
Insulator: PBT+30% Glass Fiber (Meet UL94V-0).

Specification:
Current rating: 5 A Max.
Withstanding voltage: AC 500V for 1 Minute.
Contact resistance: 15 mΩ Max.
Insulation resistance: 1000 MΩ Min. at DC 500V
Operating Temperature : -40°C~+105°C

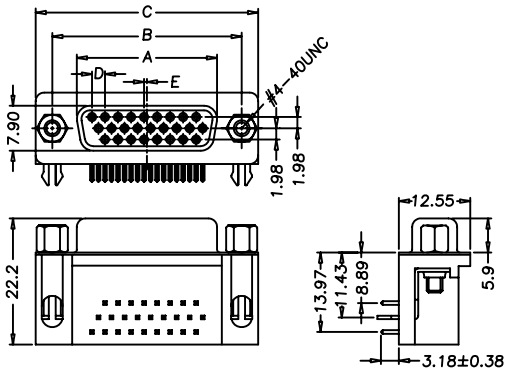


PART No.	DIM A	DIM B	DIM C	DIM D	DIM E
HDR-PG-15	16.92	24.99	30.81	2.29	0.25
HDR-PG-26	25.25	33.32	39.14	2.29	0.51
HDR-PG-44	38.96	47.04	53.04	2.29	0.51
HDR-PG-62	55.42	63.50	69.32	2.41	0.58

HDR-SG-xx

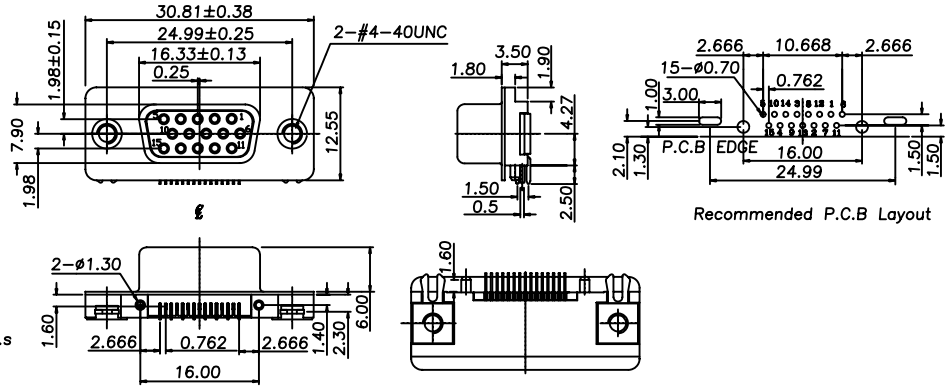
Material:
Insulator: PBT+30% Glass Fiber (Meet UL94V-0).

Specification:
Current rating: 5 A Max.
Withstanding voltage: AC 500V for 1 Minute.
Contact resistance: 15 mΩ Max.
Insulation resistance: 1000 MΩ Min. at DC 500V
Operating Temperature : -40°C~+105°C



PART No.	DIM A	DIM B	DIM C	DIM D	DIM E
HDR-SG-15	16.92	24.99	30.81	2.29	0.25
HDR-SG-26	25.25	33.32	39.14	2.29	0.51
HDR-SG-44	38.96	47.04	53.04	2.29	0.51
HDR-SG-62	55.42	63.50	69.32	2.41	0.58

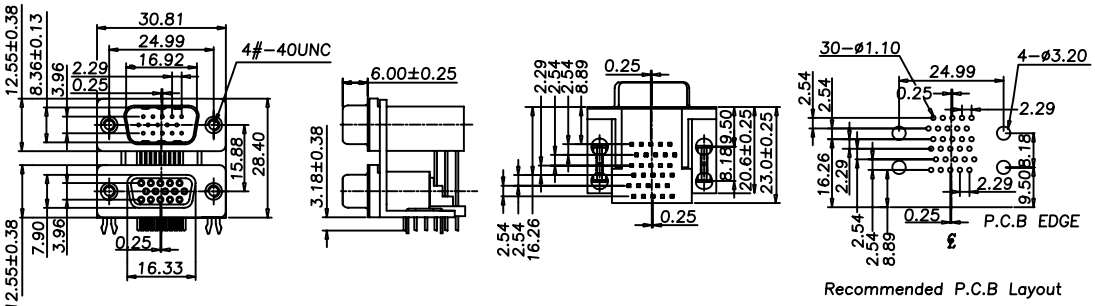
HDR15-SNRV-15



Materials
Insulator: PBT or High Temp Thermal Plastic 94V-0 Rated.

Specification:
Current rating: 3 Amperes.
Dielectric withstanding Voltage: AC 1000/60sec.r.m.s
Contact resistance: 25mΩ Max.
Insulation resistance: 5000 MΩ Min. at DC 500V
Temperature range: -55°C~+105°C

DRB1-EN15-3535

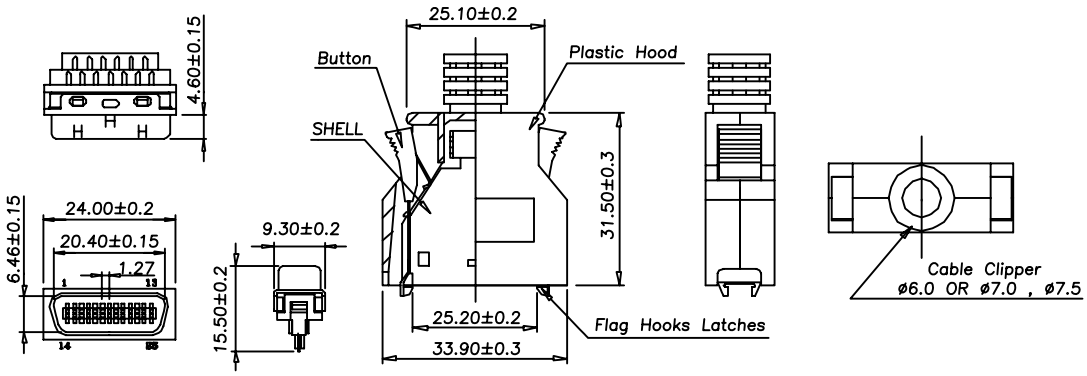


MATERIALS:
Contacts:Brass.
Insulator: PBT UL 94V-0 Rated.
Shell:Cold Roller Steel.
Grounding Screw Torque:Brass
FINISHES:
Contact:Gold Flash.
Shell:Nickel Plated.

Half pitch Connector

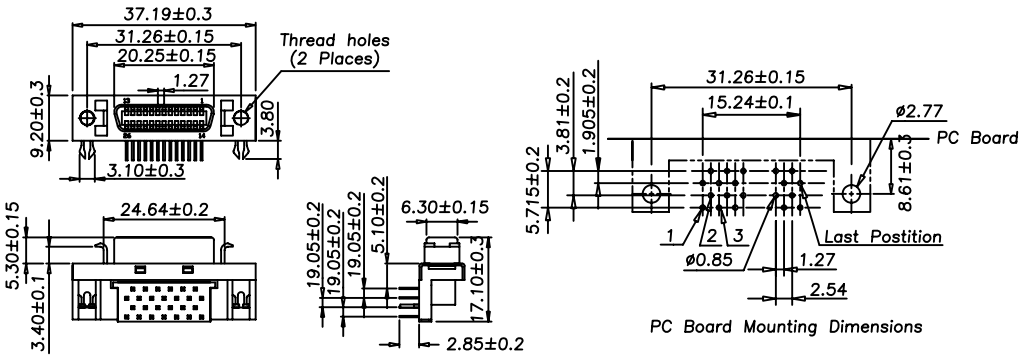
HPC-PSQ-026

Material:
Hood: Plastic ABS PA-769
Inner Shell:Steel,Nickel plated
Latch:Phosphor bronze,Nickel plated
Latch:Stainless steel



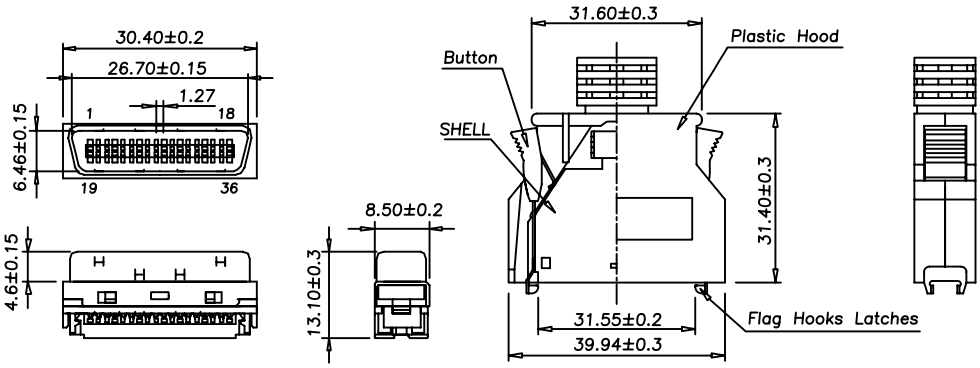
HPC-SRL-026

Material:
Housing and cover:Plastic thermoplastic P.B.T UL94V-0
Electrical:
Current Rating: 1 Amps.
Withstanding Voltage: 500V AC/Min
Insulation Resistance: 500M ΩMin.
Contact Resistance: 35mΩ Max..
Operating Temperature: -55°C~+105°C.



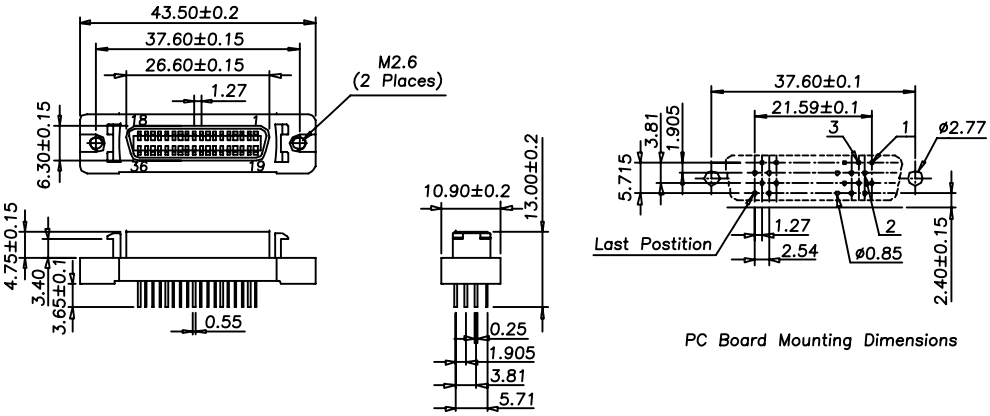
HPC-PFQ-036

Material:
Hood: Plastic ABS PA-769
Inner Shell:Steel,Nickel plated
Latch:Phosphor bronze,Nickel plated
Latch:Stainless steel
Electrical:
Current Rating: 1 Amps.
Withstanding Voltage: 500V AC/Min
Insulation Resistance: 500M ΩMin.
Contact Resistance: 35mΩ Max..
Operating Temperature: -55°C~+105°C.

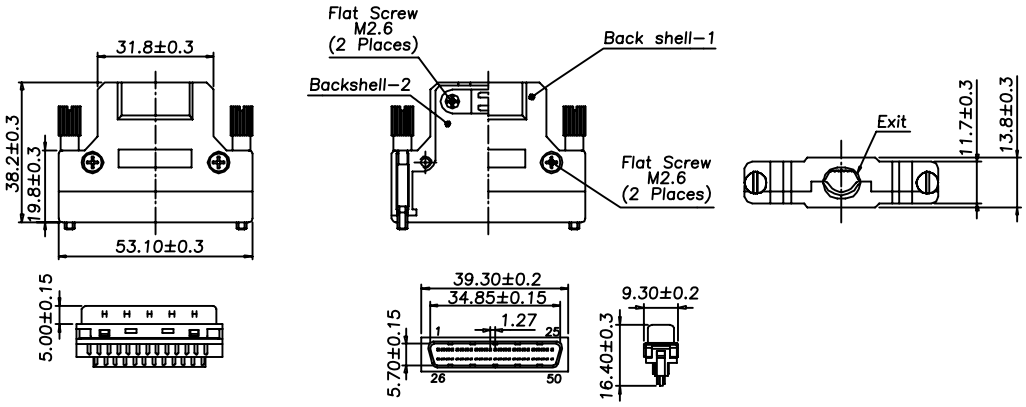


HPC-SDL-036

Material:
Housing and cover:Plastic thermoplastic P.B.T UL94V-0
Electrical:
Current Rating: 1 Amps.
Withstanding Voltage: 500V AC/Min
Insulation Resistance: 500M ΩMin.
Contact Resistance: 35mΩ Max..
Operating Temperature: -55°C~+105°C.

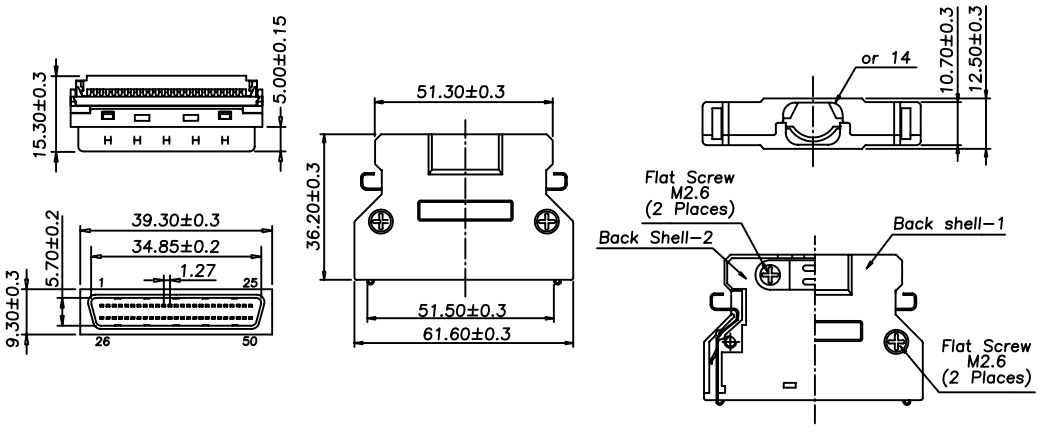


HPD-PSM-050



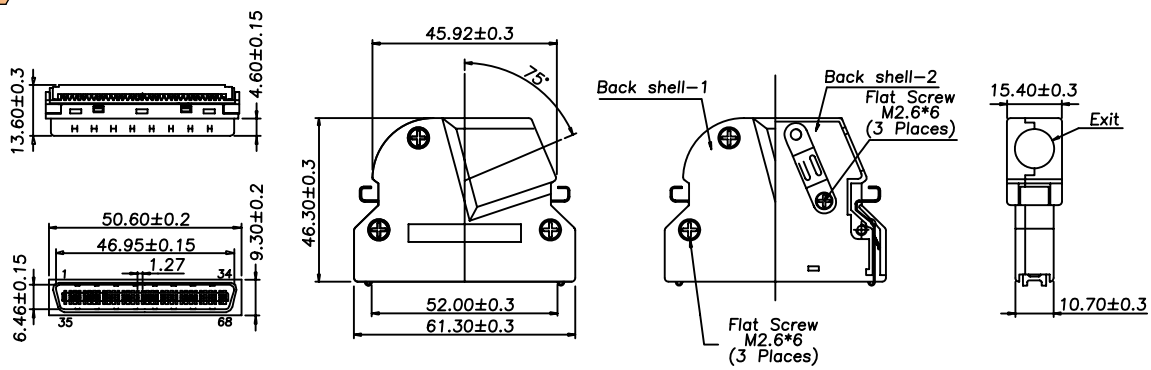
Material:
Housing and cover:Plastic thermoplastic P.B.T UL94V−0
Electrical:
Current Rating: 1 Amps.
Withstanding Voltage: 500V AC/Min
Insulation Resistance: 500M ΩMin.
Contact Resistance: 35mΩ Max..
Operating Temperature: −55°C~+105°C.

HPD-PFW-050

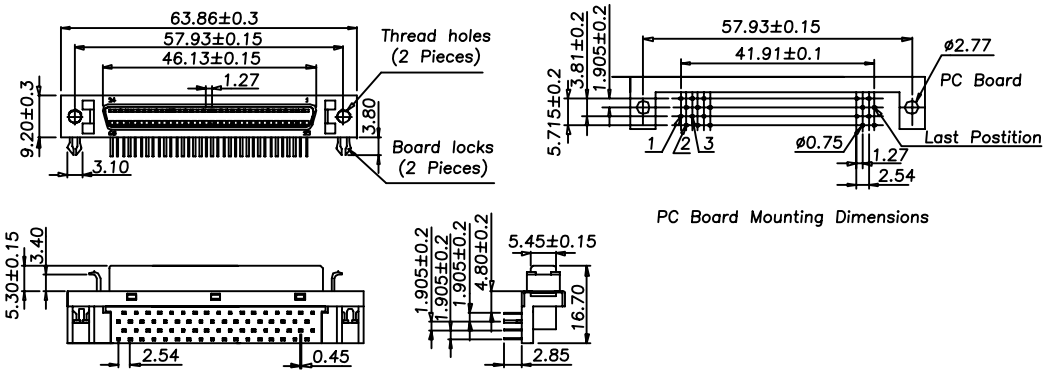


Materials:
Backshell: Zinc plated nickel over copper
Spring latches: phosphor Bronze over nickel
Screw: steel nickel plated over copper
Cable clipper: steel nickel plated

HPD-PFWA-068



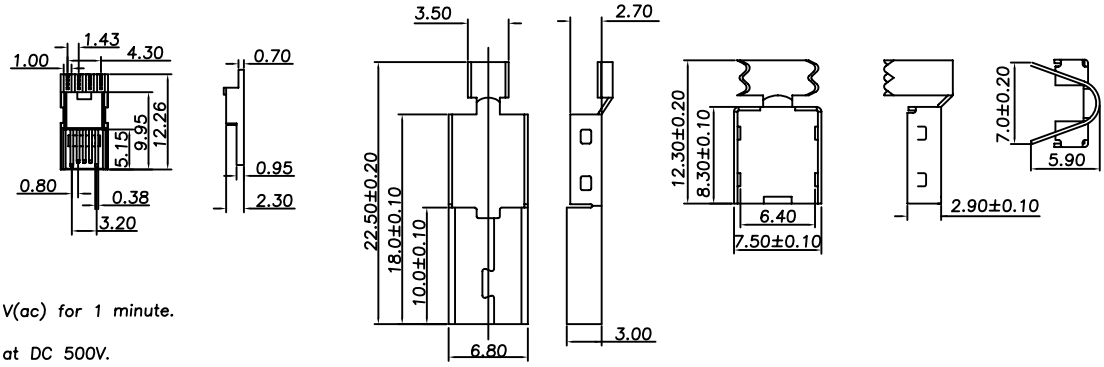
HPD-SRL-068



Material:
Housing and cover:Plastic thermoplastic P.B.T UL94V−0
Electrical:
Current Rating: 1 Amps.
Withstanding Voltage: 500V AC/Min
Insulation Resistance: 500M ΩMin.
Contact Resistance: 35mΩ Max..
Operating Temperature: −55°C~+105°C.

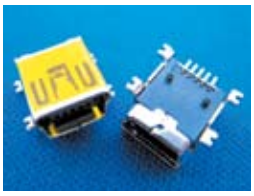
Mini USB Connector

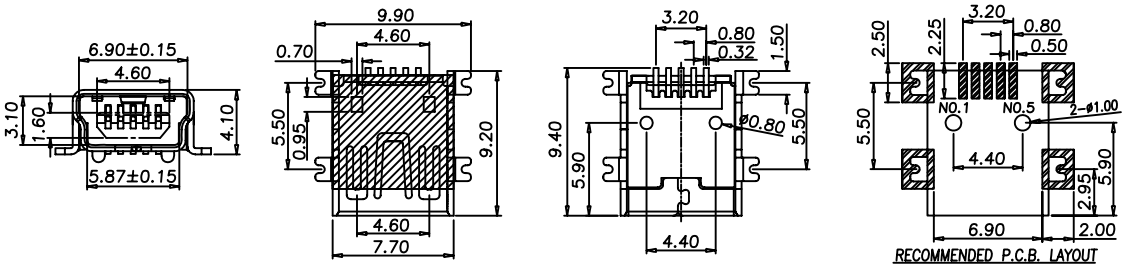
MSB-PS-5B



Material:
Insulator: P.B.T UL 94–V0 rated.
Specification:
Current rating: 1 A Max.
Dielectric withstanding voltage: 500 V(ac) for 1 minute.
Contact resistance: 30 mΩ Max.
Insulation resistance: 1000 mΩ Min at DC 500V.
Temperature range: –55°C~+105°C.

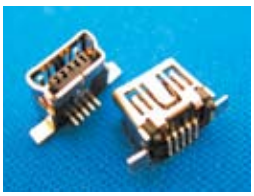
MSB-SWC-5B

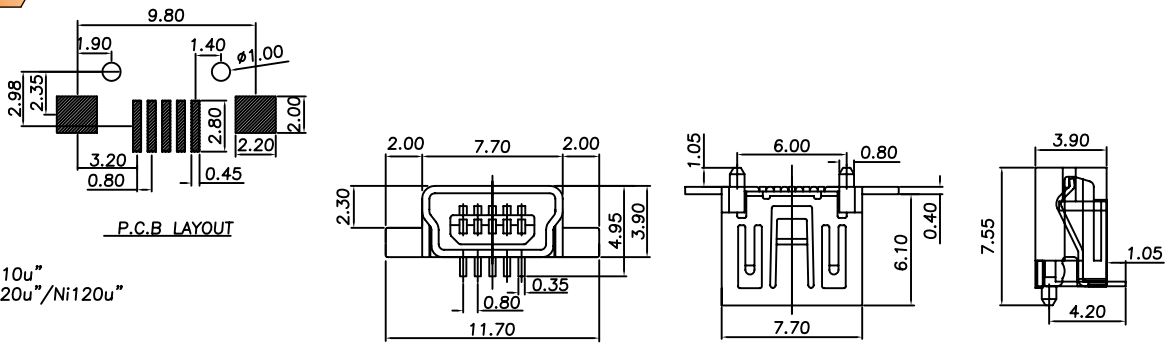




Material:
Housing:LCP
Contact:Phosphor Bronze
Shell:Phosphor Bronze
Specification:
Current rating: 5V / 1 A Max.
Dielectric withstanding voltage: 100 V(ac) /3mA 1 Minute.
Insulation resistance: 500Vdc for 1 Minute.

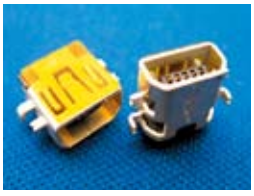
MSB-SVEP-5B

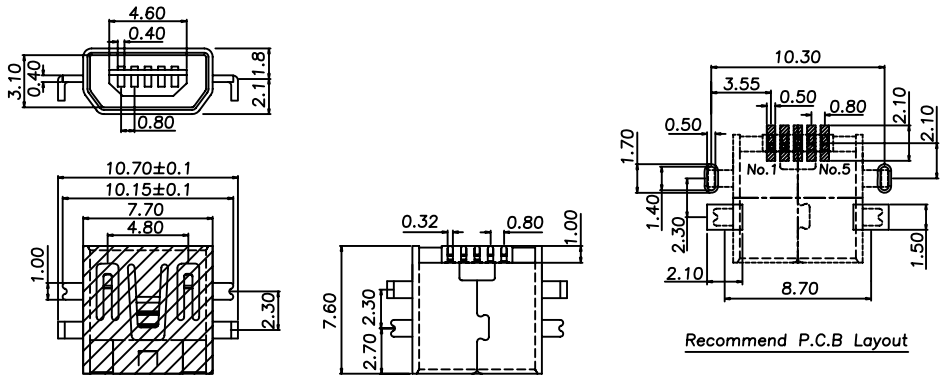




Material:
Housing:LCP
Pin:Phosphor Bronze/Gold 10u"
Shell:Phosphor Bronze / 120u"/Ni120u"
Specification:
Rating: 5V / 1 A
Dielectric withstanding voltage: AC 100V for 1 Minute
Insulation resistance: 100M ohm Min at DC 500V
Contact Resistance: 30m ohm or less

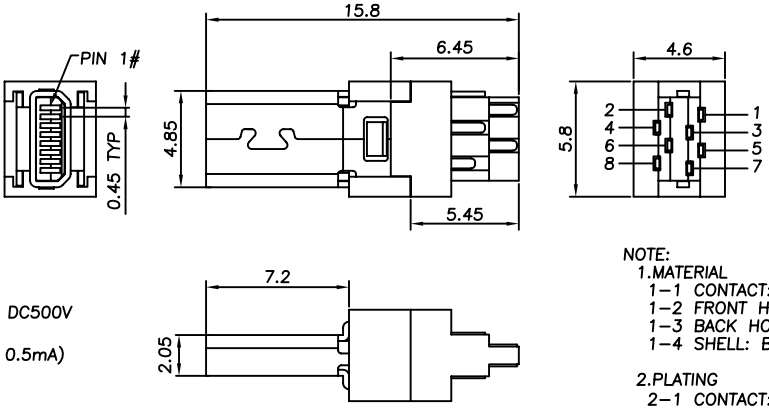
MSB-SWFEMC-5AB





Material:
Housing:LCP
Pin:Phosphor Bronze
Shell: Brass
Specification:
Rating: 5V / 1 A
Dielectric withstanding voltage: AC 100V for 1 Minute
Insulation resistance: 100M ohm Min at DC 500V
Contact Resistance: 30m ohm or less

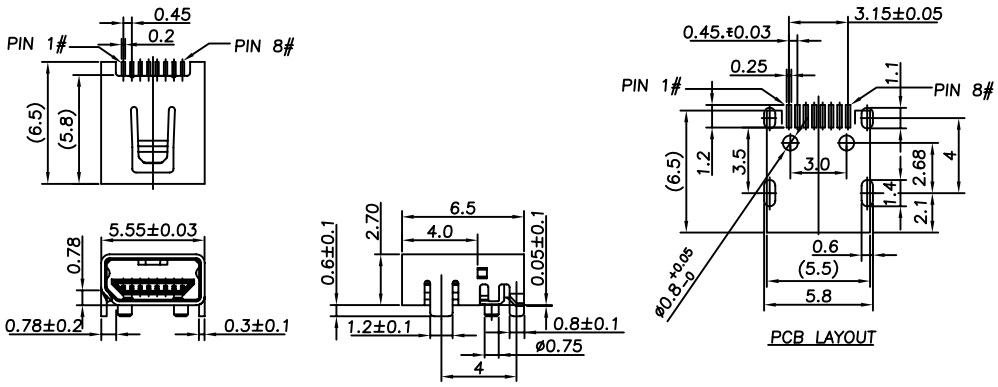
MSB-PS-8A



Specifications:
1.Electrical:
1–1 Rating: AC 5V/0.5A
1–2 Contact Resistance: 50m Ohm or less
1–3 Insulation Resistance: 100M Ohm Min at DC500V
1–4 Dielectric Withstanding Voltage: AC 100V for 1 minute(Cut–off: 0.5mA)
2.Mechanical:
2–1 Insertion force: 35N (3.57kgf) max.
2–2 Withdrawal Force: 1N (0.1kgf) min.

NOTE:
1.MATERIAL
1–1 CONTACT: PHOSPHORUS COPPER
1–2 FRONT HOUSING: LCP
1–3 BACK HOUSING: LCP
1–4 SHELL: BRONZE
2.PLATING
2–1 CONTACT: GOLD 10u"/TIN
2–2 SHELL: NICKEL

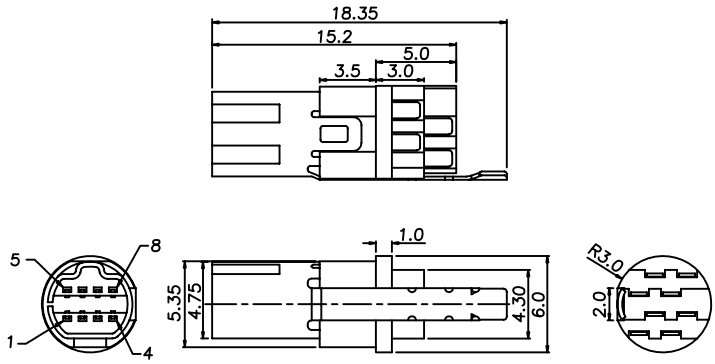
MSB-SW-8A



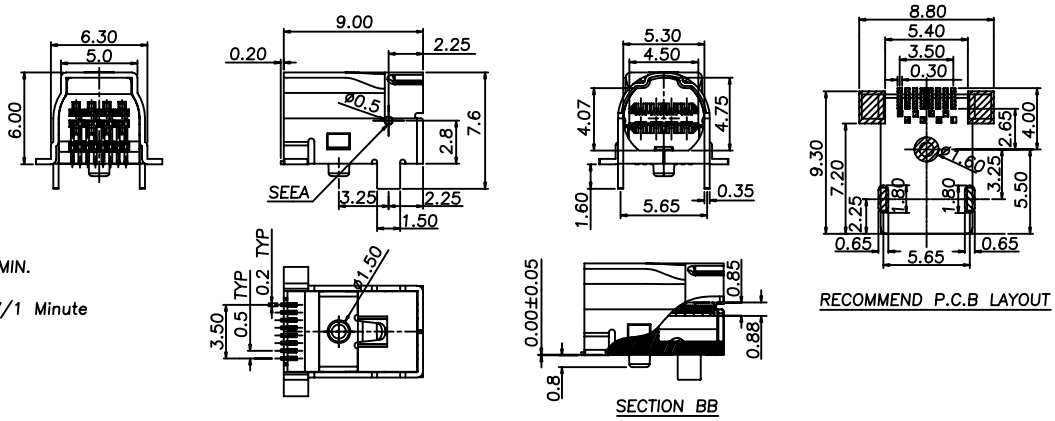
NOTE:
1.MATERIAL
1–1 CONTACT: PHOSPHOR BRONZE
1–2 HOUSING: LCP
1–3 SHELL: PHOSPHOR BRONZE
2.PLATING
2–1 CONTACT: GOLD 10u"
2–2 SHELL: GOLD FLASH 1–3u"

MSB-PS-8B

NOTE:
1.MATERIAL
1–1 PIN: PHOSPHOR BRONZE
1–2 HOUSING: LCP
1–3 SHELL: PHOSPHOR BRONZE
2.PLATING
1–1 PIN;TIN 120u" GOLD 3u"



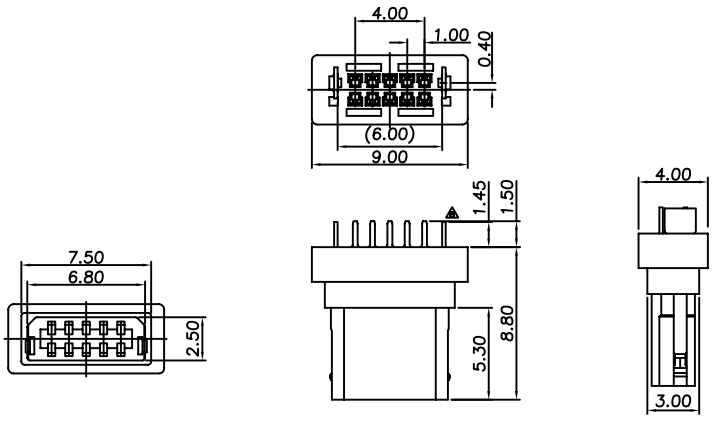
MSB-SW-8B



ELECRTICAL PROPERTIES
Contact current rating: 1A at 250V AC MIN.
Contact Resistance: 50m ohm max
Insulation Resistanding voltage: AC 100V/1 Minute
MATERIAL
Terminal: Phosphor Bronze
Housing: LCP
Shell:Material: Brass C2680 T=0.35±0.01
Ground shell: Brass C2680 T=0.30±0.01

MSB-PS-10D

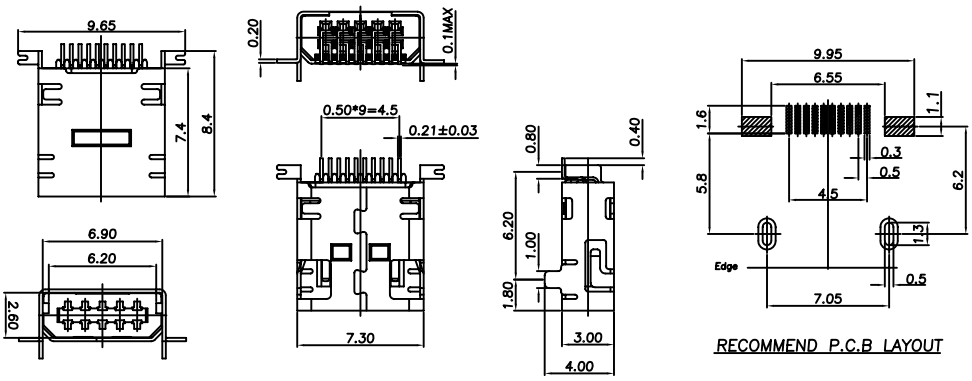
MATERIAL:
HOUSING: PBT+30%GF
PIN: PHOSPHOR BRONZE
SPRIN: PHOSPHOR BRONZE
PLATING:
PIN: SEE TABLE A
SPRIN: TIN



MSB-SW-10D

MATERIAL:
HOUSING: LCP.
PIN: PHOSPHOR BRONZE.
SHELL: PHOSPHOR BRONZE.

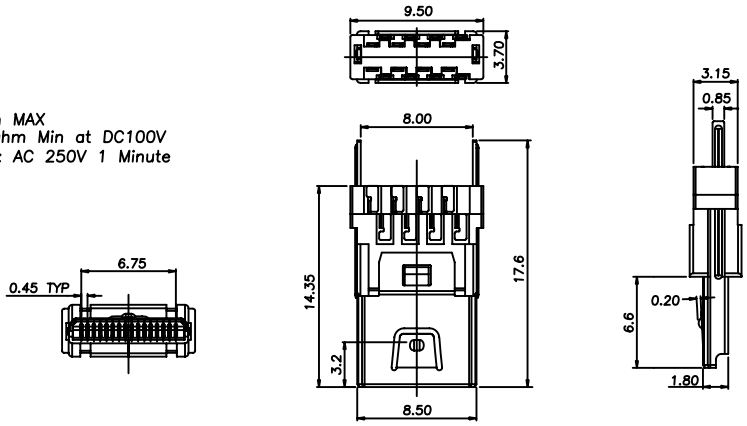
PLATING:
PIN: TABLE A
SHELL: TIN.



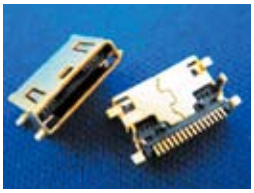
MSB-PS-16

Specifications:
1.Electrical:
Rating: DC 30V/1A
Contact Resistance: 30m Ohm MAX
Insulation Resistance: 500M Ohm Min at DC100V
Dielectric Withstanding Voltage: AC 250V 1 Minute

2.Material:
Pin: Phosphor Bronze
Housing: LCP
Shell: Phosphor Bronze
Back Cover: PBT+30%GF

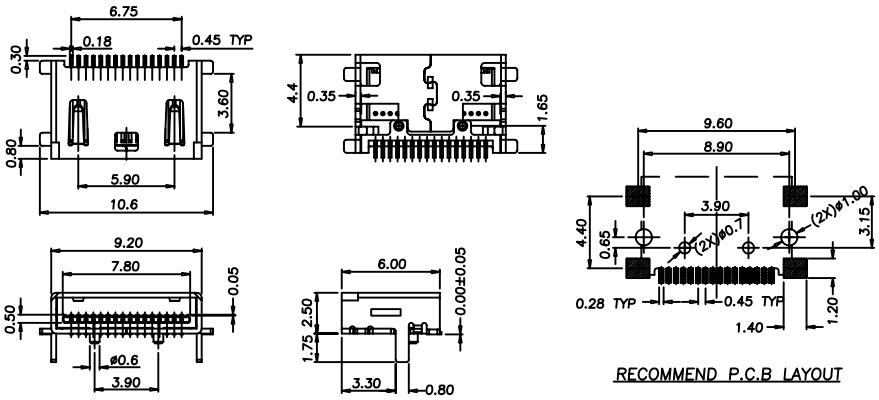


MSB-SW-16



2.Material:
Pin: Phosphor Bronze
Housing: LCP
Shell: Phosphor Bronze

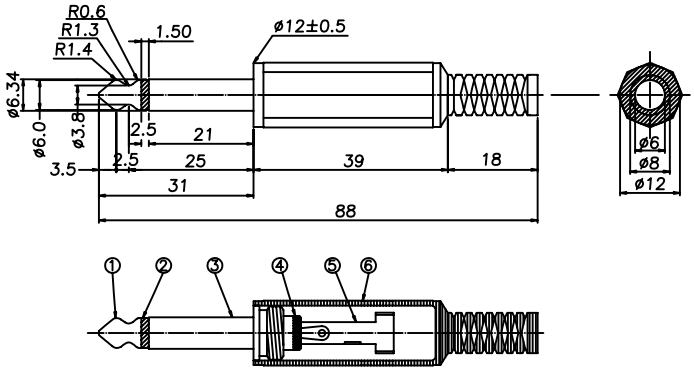
Specifications:
1.Electrical:
Rating: DC 30V/1A
Contact Resistance: 30m Ohm MAX
Insulation Resistance: 500M Ohm Min at DC100V
Dielectric Withstanding Voltage: AC 250V 1 Minute



Audio 6.3mm Connector

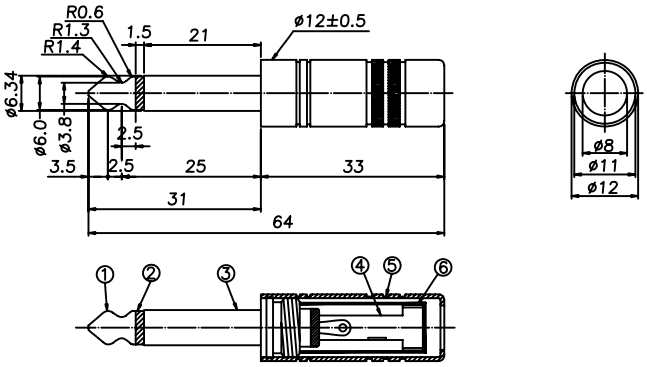
HP-A-02

PART No.	MATERIAL	PLATING
1	BRASS	GOLD
2	A.B.S	BLACK
3	BRASS	GOLD
4	A.B.S	BLACK
5	BRASS	NICKEL
6	P.E	BLACK

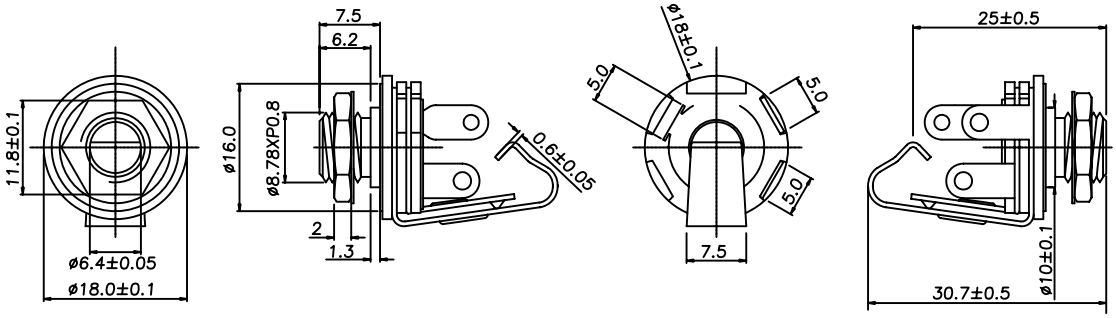


HP-AG-02M

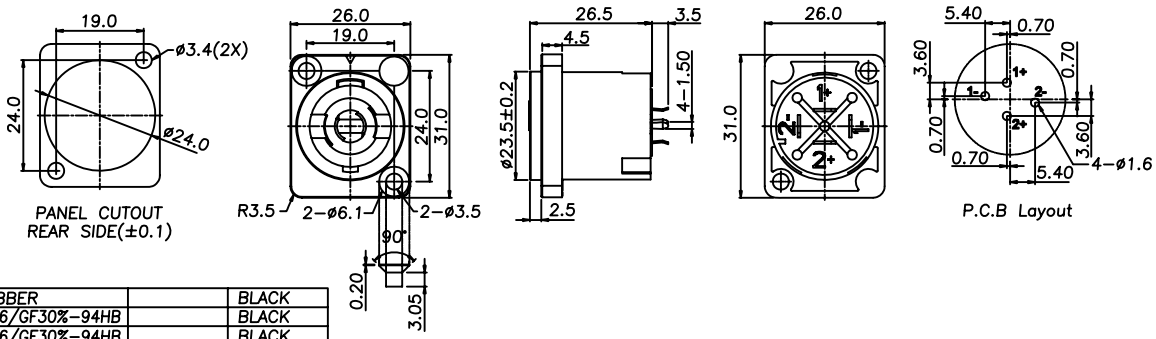
6	PVC
5	BRASS GOLD
4	BRASS NICKEL
3	BRASS GOLD
2	ABS BLACK
1	BRASS GOLD
NO.	CONTENT



HJ-SPB-02A



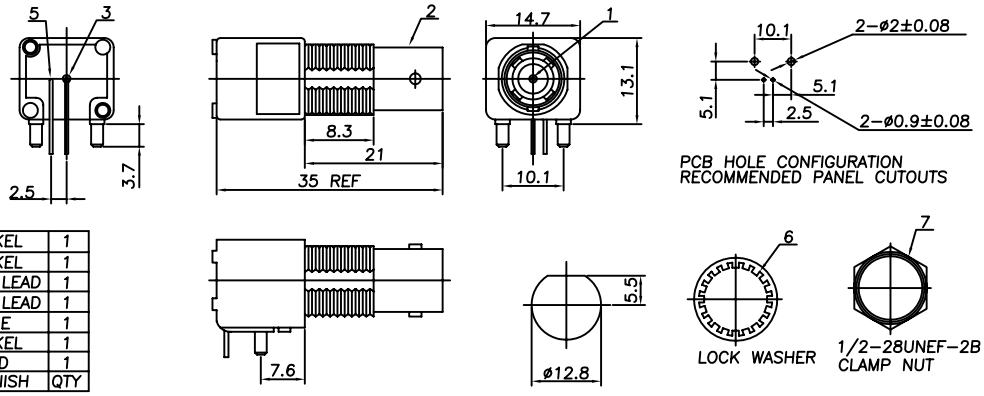
HPJ-DPQ-04



NO	PART NAME	Q'TY	MATERIAL	PLATED	REMARK
5	SPRING RING	1	RUBBER		BLACK
4	COVER	1	PA66/GF30%-94HB		BLACK
3	HOUSING	1	PA66/GF30%-94HB		BLACK
2	CONTACTS	4	P.B.S	SIL VER	
1	EARTH TERMINAL	1	SK7△	NICKEL	

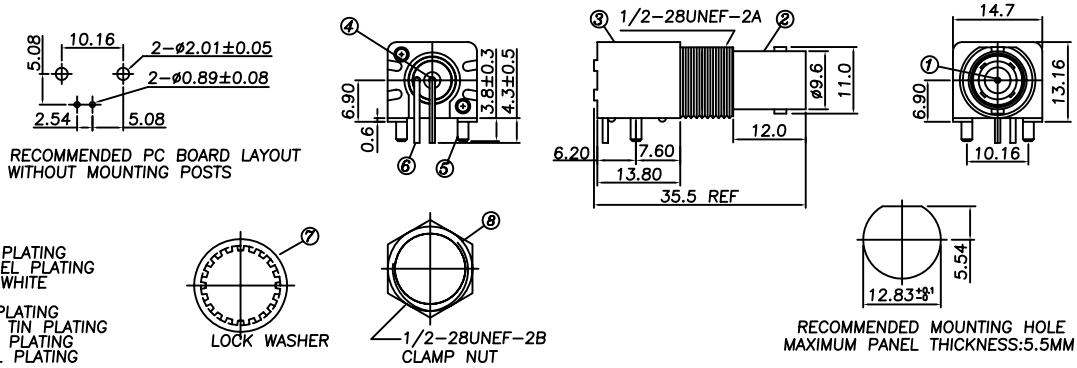
BNC Connector

BNC-JR13WFM-50



NO	DESCRIPTION	MATERIAL	FINISH	QTY
7	NUT	BRASS	NICKEL	1
6	WASHER	PHOSPHOR BRONZE	NICKEL	1
5	GROUND TAIL	BRASS WIRE	TIN LEAD	1
4	MOUNTING POST	BRASS	TIN LEAD	1
3	INSULATOR	PE-606	NONE	1
2	BODY	ZINC ALLOY	NICKEL	1
1	CENTER CONTACT	PHOSPHOR BRONZE	GOLD	1

BNC-JR13WWH-50

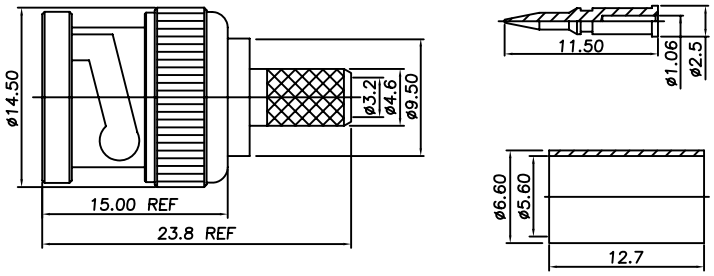


MATERIAL & FINISH

1. CENTER CONTACT :BRONZE,GOLD PLATING
2. BODY :ZINC ALLOY,NICKEL PLATING
3. HOUSING :PBT (94 V-0)WHITE
4. INSULATOR :PE-606
5. MOUNTING POST :BRONZE, TIN PLATING
6. SOLDER TAIL :COPPER WIRE, TIN PLATING
7. WASHER :STEEL, NICKEL PLATING
8. NUT :BRASS, NICKEL PLATING

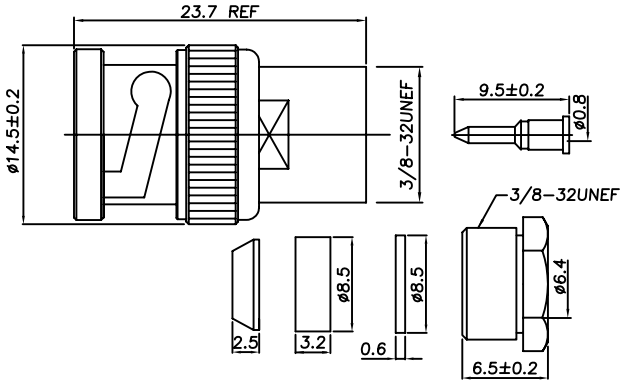
BNC-PC-58

NO	DESCRIPTION	MATERIAL	FINISH	QTY
9	FERRULE	BRASS	NICKEL	1
8	GASKET	RUBBER	RED	1
7	WASHER	STEEL	NICKEL	1
6	SPRING	SK-5	NICKEL	1
5	WASHER	STEEL	NICKEL	1
4	PIN	BRASS	GOLD	1
3	INSULATOR	DELRIN	WHITE	1
2	BODY	BRASS	NICKEL	1
1	SHELL	BRASS	NICKEL	1



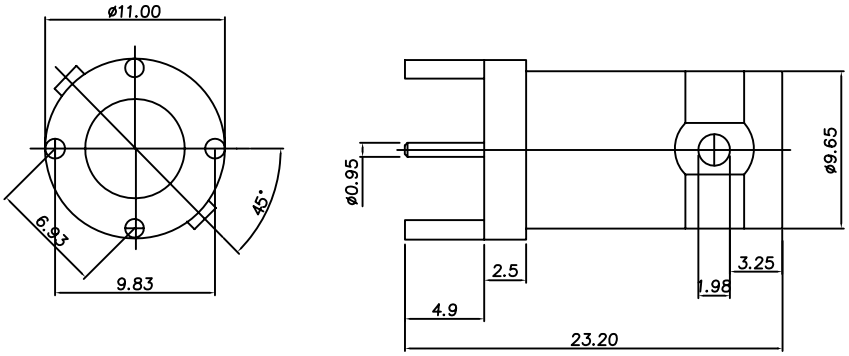
ELECTRICAL SPECIFICATIONS:
VOLTAGE RATING:AC 500V
WITH STANDING VOLTAGE:AC 1,500V ONE MINUTE
INSULATION RESISTANCE:1,000M Ω MIN AT DC 500V
CONTACT RESISTANCE :3MW MAX AT DC 1A
FREQUENCY RANGE :0-4GHZ
VSWR:1.2MAX 0-2GHZ
IMPEDANCE :50 OHM VERSIONS

BNC-PS-59



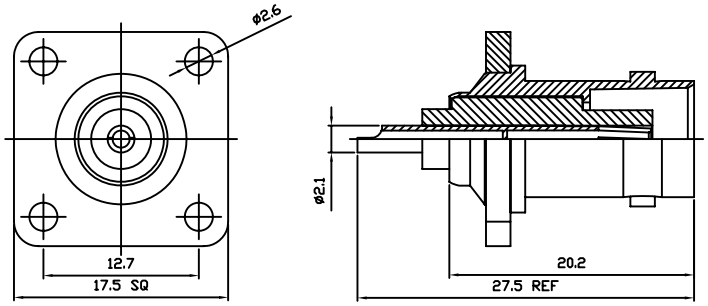
NO	DESCRIPTION	MATERIAL	FINISH	QTY
12	NUT	ZINC	NICKEL	1
11	WASHER	BRASS	NICKEL	1
10	RUBBER WASHER	RUBBER	RED	1
9	WASHER	BRASS	NICKEL	1
8	CENTER CONTACT	BRASS	GOLD	1
7	BODY	ZINC	NICKEL	1
6	WASHER	FE	NICKEL	1
5	SPRING	65MN		1
4	OUT CONTACT	ZINC ALLOY	NICKEL	1
3	RUBBER WASHER	PVC	RED	1
2	SHELL	ZINC	NICKEL	1
1	INSULATOR	ABS		1

BNC-JDL232-50



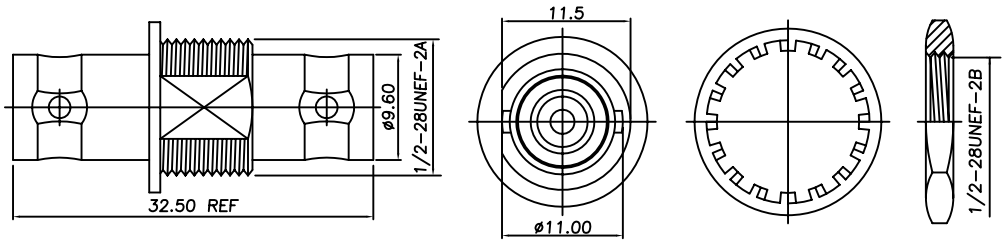
NO	Desription	Q'ty	Material	Pinish
4	Dress it washer	1	Brass	Nickel
3	Dielectric	1	Delrin	None
2	PIN	1	Brass	Gold
1	Bady	1	Zinc	Nickel

BNC-JSPQ-50



NO	DESCRIPTION	MATERIAL	FINISH	QTY
4	PANEL	BRASS	NICKEL	1
3	INSULATOR	DELRIN	WHITE	1
2	PIN	PHOSPHOR BRONZE	GOLD	1
1	BODY	BRASS	NICKEL	1

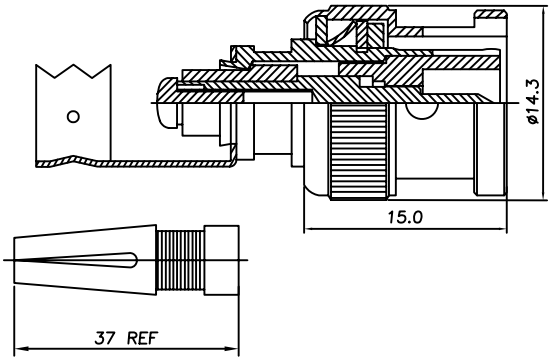
BNCX2-FSPN-75



NO	DESCRIPTION	MATERIAL	FINISH	QTY
7	UNT	BRASS	NICKEL	1
6	WASHER	BRASS	NICKEL	1
5	PRESS IT WASHER	BRASS	NICKEL	1
4	DIELECTRIC	DELRIN	NONE	1
3	DIELECTRIC	DELRIN	NONE	1
2	PIN	BRASS	GOLD	1
1	BODY	BRASS	NICKEL	1

BNC-PA-58

NO	DESCRIPTION	MATERIAL	FINISH	QTY
12	SCREW	STEEL	NICKEL	1
11	WASHER	IRON	NICKEL	1
10	SPRING	SK-5	NICKEL	1
9	WASHER	STEEL	NICKEL	1
8	GASKET	RUBBER	RED	1
7	INSULATOR	DELRIN	WHITE	1
6	INSULATOR	DELRIN	WHITE	1
5	PIN	BRASS	GOLD	1
4	GROUND RING	BRASS	NICKEL	1
3	BODY	PVC	BLACK	1
2	BODY	ZINC	NICKEL	1
1	SHELL	ZINC	NICKEL	1

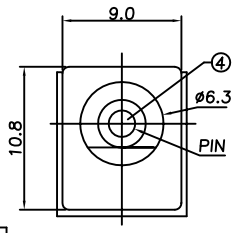


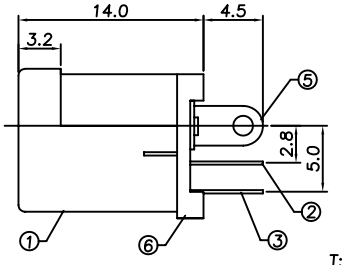
DC Power Connector

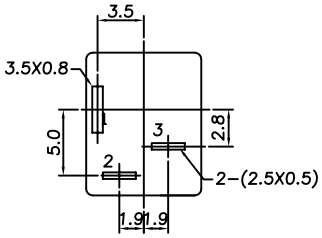
DCJ-D-xx

CAT. NO.	PIN	SCHEMATIC
DCJ-D-20	ø2.0	1 / 3
DCJ-D-25	ø2.5	3 / 2

UNLESS OTHERWISE SPECIFIED, TOLERANCE ON DECIMAL:±0.3



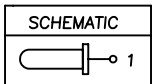


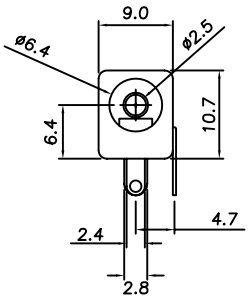


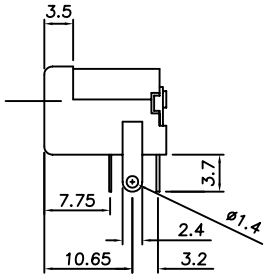
T:1.6 Dimensions of PC board holes
Tolerance : ±0.1(Printed-top view)

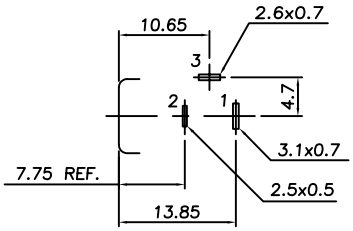
LTR	PART NAME	QTY	MATERIAL	REMARK
6	COVER	1		
5	CONTACT FOOT	1	BRASS	MB:Cu Cu/Sn PLATED
4	PIN	1	H59 BRASS	MB:Cu Ni PLATED
3	SPRING	1	65Mn STEEL	MB:Cu Cu/Sn PLATED
2	FLAT PIECE	1	H62 BRASS	MB:Cu Cu/Sn PLATED
1	HOUSING	1	PBT/PASS	

DCJ-R-25









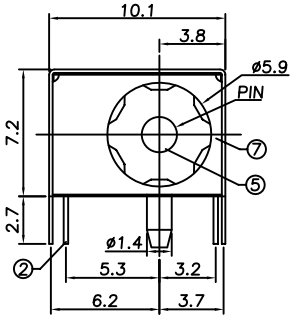
PCB LAYOUT
(BOTTOM VIEW)

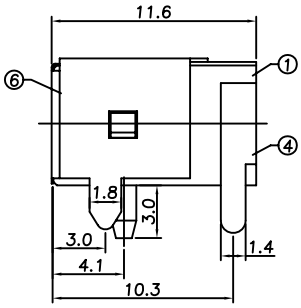
NO.	NAME	MATERIAL	FINISH
1	PIN TERMINAL	BRASS 0.4THK	TIN PLATED
2	SLEEVE TERMINAL	PBS 0.25THK	TIN PLATED
3	BREAK TERMINAL	BRASS 0.4THK	TIN PLATED
4	HOUSING	P.B.T.	BLACK
5	CENTER PIN	BRASS ø2.5	NICKEL PLATED

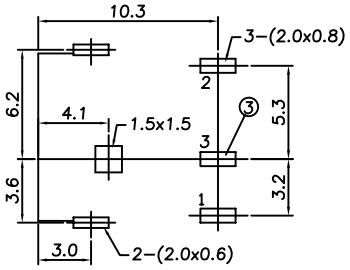
DCJ-R40AM-xx

CAT. NO.	PIN	SCHEMATIC
DCJ-R40AM-20	ø2.0	1
DCJ-R40AM-25	ø2.5	3
DCJ-R40AM-165	ø1.65	2

UNLESS OTHERWISE SPECIFIED, TOLERANCE ON DECIMAL:±0.3

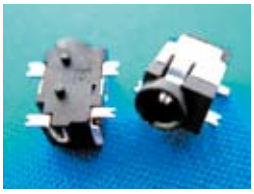


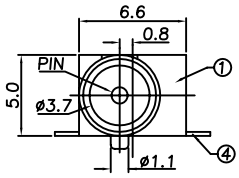


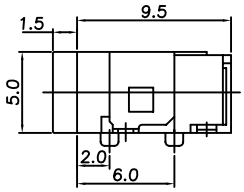


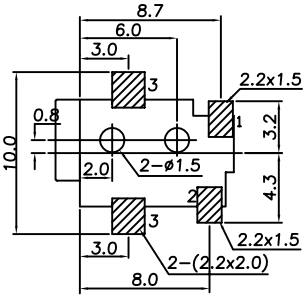
T:1.6 Dimensions of PC board holes
Tolerance : ±0.1(Printed-top view)

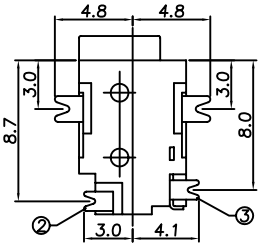
DCJ-W24-xx











SCHEMATIC		
DCJ-W24-10	ø1.0	3 / 1
DCJ-W24-13	ø1.3	2

UNLESS OTHERWISE SPECIFIED, TOLERANCE ON DECIMAL: ±0.2

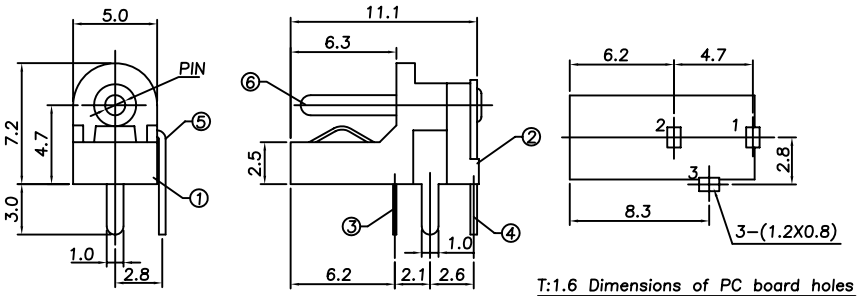
T:1.6 Dimensions of PC board holes
Tolerance : ±0.1(Printed-top view)

LTR	PART NAME	QTY	MATERIAL	REMARK
4	CONTACT FOOT	1	BRASS	MB:Cu Ag PLATED
3	SPRING	1	BRONZE	MB:Cu Ag PLATED
2	PIN	1	BRONZE	MB:Cu Ag PLATED
1	HOUSING	1	PBT/PA46	

DCJ-R□P-xx

CAT. NO.	PIN	SCHEMATIC
DCJ-ROP-10	ø1.0	1
DCJ-ROP-13	ø1.3	3, 2

UNLESS OTHERWISE SPECIFIED, TOLERANCE ON DECIMAL:±0.3



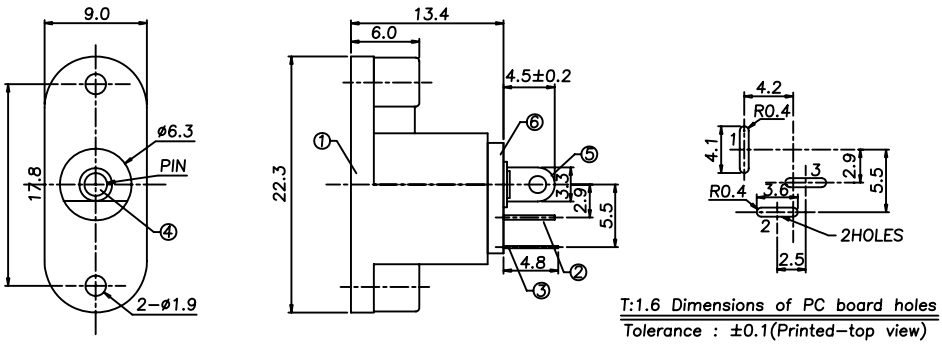
T:1.6 Dimensions of PC board holes
Tolerance : ±0.1(Printed-top view)

LTR	PART NAME	QTY	MATERIAL	REMARK
6	PIN	1	H59 BRASS	MB:Cu Ni PLATED
5	CURVE PIECE	1	H62 BRASS	MB:Cu Ag PLATED
4	FLAT PIECE	1	H62 BRASS	MB:Cu Ag PLATED
3	SPRING PIECE	1	STAINLESS STEEL	MB:Cu Ag PLATED
2	COVER	1	PBT/PA66/ABS	
1	HOUSING	1	PBT/PA66/ABS	

DCJ-DPE13-xx

CAT. NO.	PIN	SCHEMATIC
DCJ-DPE13-20	ø2.0	1
DCJ-DPE13-25	ø2.5	3, 2

UNLESS OTHERWISE SPECIFIED, TOLERANCE ON DECIMAL:±0.3

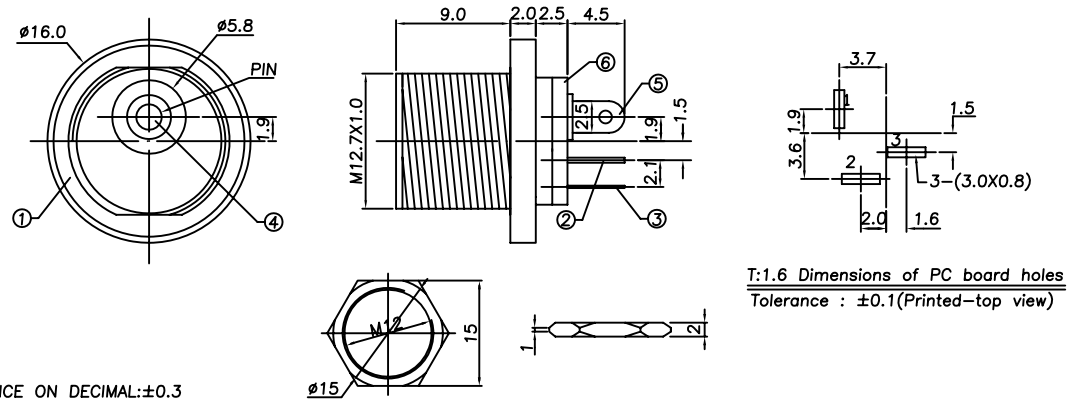


T:1.6 Dimensions of PC board holes
Tolerance : ±0.1(Printed-top view)

DCJ-DPBH-xx

CAT. NO.	PIN	SCHEMATIC
DCJ-DPBH-20	ø2.0	1
DCJ-DPBH-25	ø2.5	3, 2

UNLESS OTHERWISE SPECIFIED, TOLERANCE ON DECIMAL:±0.3

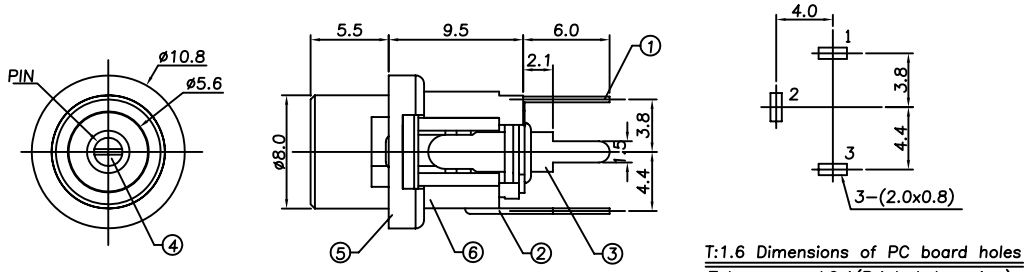


T:1.6 Dimensions of PC board holes
Tolerance : ±0.1(Printed-top view)

DCJ-DPB-xx

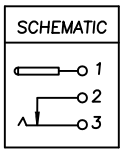
CAT. NO.	PIN	SCHEMATIC
DCJ-DPB-20	ø2.0	1
DCJ-DPB-25	ø2.5	3, 2

UNLESS OTHERWISE SPECIFIED, TOLERANCE ON DECIMAL:±0.3

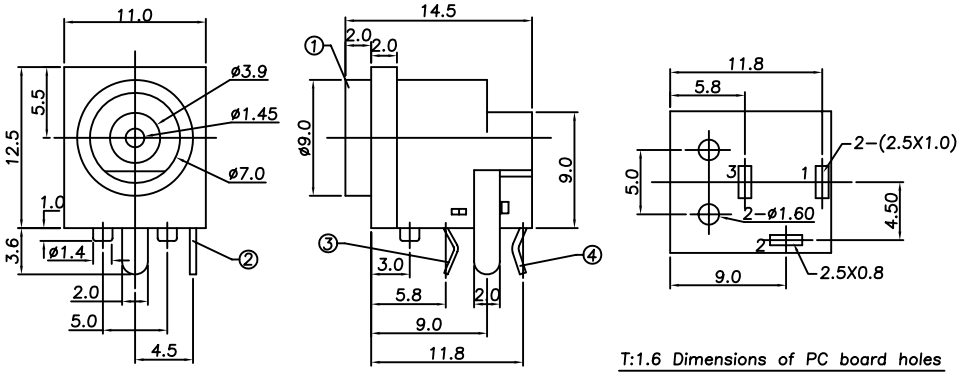


T:1.6 Dimensions of PC board holes
Tolerance : ±0.1(Printed-top view)

DCP-R30-145



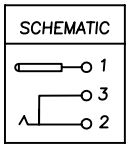
UNLESS OTHERWISE SPECIFIED,
TOLERANCE ON DECIMAL:±0.3



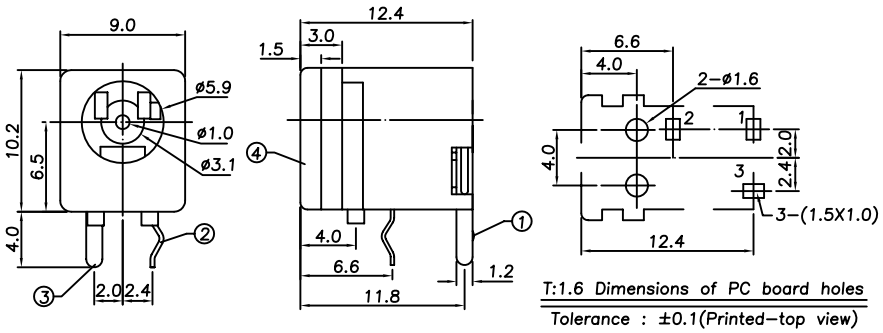
T:1.6 Dimensions of PC board holes
Tolerance : ±0.1(Printed-top view)

LTR	PART NAME	QTY	MATERIAL	REMARK
4	CONTACT FOOT	1	BRONZE	MB:Cu Ag PLATED
3	SPRING	1	BRONZE	MB:Cu Ag PLATED
2	CURVE PIECE	1	BRASS	MB:Cu Ag PLATED
1	HOUSING	1	PBT	

DCP-R40-10



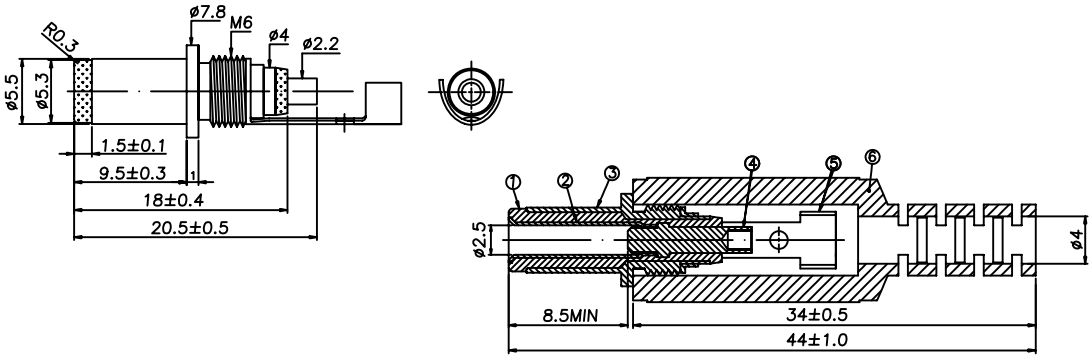
UNLESS OTHERWISE SPECIFIED,
TOLERANCE ON DECIMAL:±0.3



T:1.6 Dimensions of PC board holes
Tolerance : ±0.1(Printed-top view)

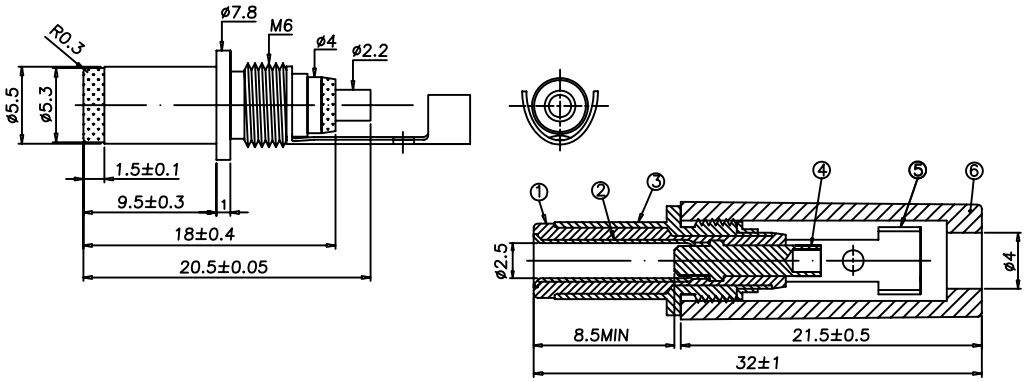
LTR	PART NAME	QTY	MATERIAL	REMARK
4	HOUSING	1	PBT/PA66/PC	
3	SPRING	1	BRONZE	MB:Cu Ag PLATED
2	CURVE PIECE	1	BRASS	MB:Cu Ag PLATED
1	FLAT PIECE	1	BRASS	MB:Cu Ag PLATED

DCP-A-5525



NO	CONTENT
6	PVC BLACK
5	BRASS NICKEL
4	BRASS NICKEL
3	BRASS NICKEL
2	BRASS NICKEL
1	POM BLACK

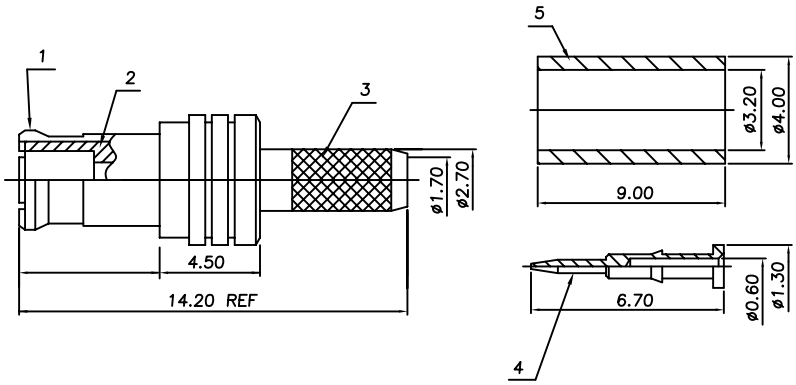
DCP-A-5525SC9



NO	CONTENT
6	ABS BLACK
5	BRASS NICKEL
4	BRASS NICKEL
3	BRASS NICKEL
2	BRASS NICKEL
1	POM BLACK

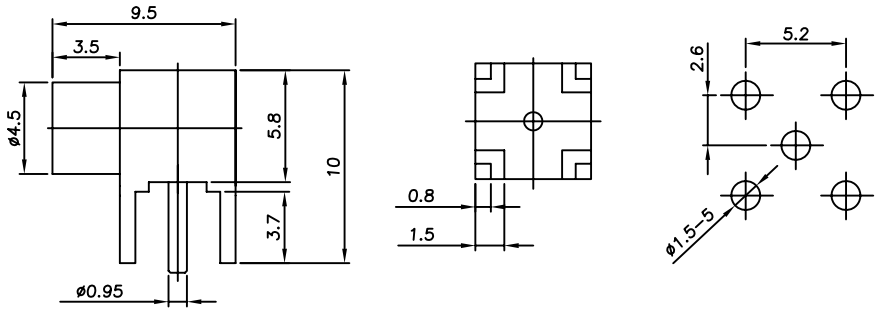
MCX Connector

MCX-PC-174



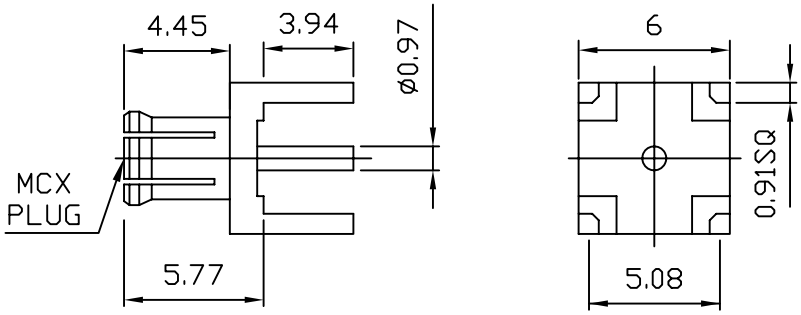
5	FERRULE	BRASS	GOLD	1
4	CONTACT MALE	BRASS	GOLD	1
3	BODY	BRASS	GOLD	1
2	INSULATOR	TEFLON		1
1	BODY	BRASS	GOLD	1
NO	DESCRIPTION	MATERIAL	FINISH	QTY

MCX-JR-50



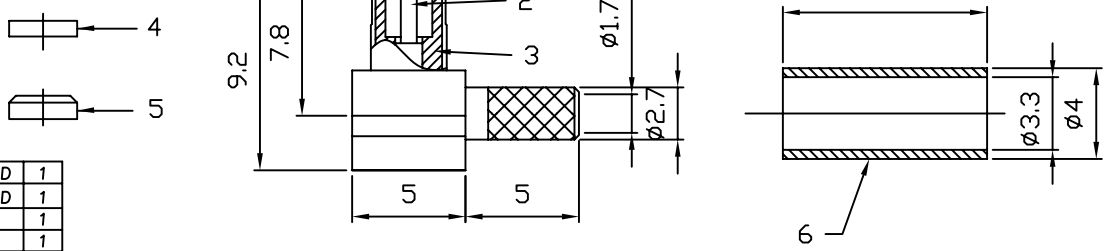
5	DIELECTRIC	TEFLON	NONE	1
4	DIELECTRIC	TEFLON	NONE	1
3	PIN	BRASS	GOLD	1
2	BODY	BRASS	GOLD	1
1	BODY	BRASS	GOLD	1
NO	DESCRIPTION	MATERIAL	FINISH	QTY

MCX-PD-50



3	INSUALTOR	TEFLON	NONE	1
2	CENTER CONTACT	BRASS	GOLD	1
1	BODY	BRASS	GOLD	1
NO	DESCRIPTION	MATERIAL	FINISH	QTY

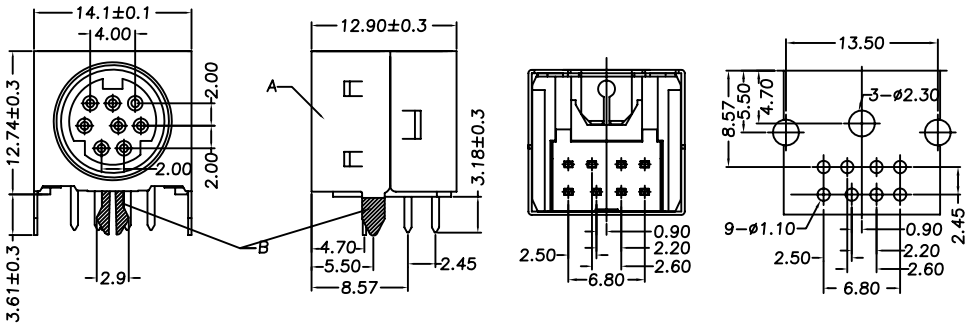
MCX-PCR-174



6	FERRULE	BRASS	GOLD	1
5	COVER	BRASS	GOLD	1
4	INSUALTOR	TEFLON		1
3	INSUALTOR	TEFLON		1
2	CENTER CONTACT	BRASS	GOLD	1
1	BODY	BRASS	GOLD	1
NO	DESCRIPTION	MATERIAL	FINISH	QTY

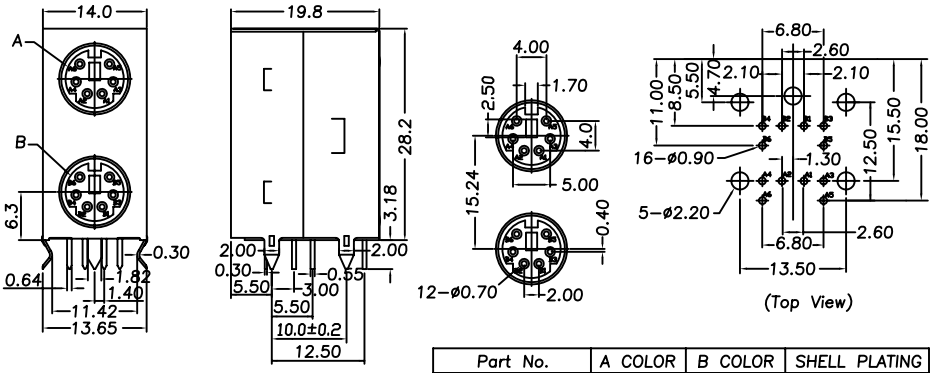
Mini Din Connector

MDJ-F-08



MATERIAL
INSULATOR: PBT UL94V-0
CONTACT: Phosphor bronze, Gold/Tin plated
SHELL: Brass, TIN Plated Or Nickel/Tin Plated
ENVIRONMENTAL
OPERATING TEMPERATURE: -55°C~105°C
ELECTRICAL
CONTACT CURRENT RATING: 1 Amp
DIELECTRIC WITHSTANDING : AC 1000V/min.R.M.S.
INSULATION RESISTANCE: 500MΩ min.at 500V DC
CONTACT RESISTANCE: 30mΩ Max

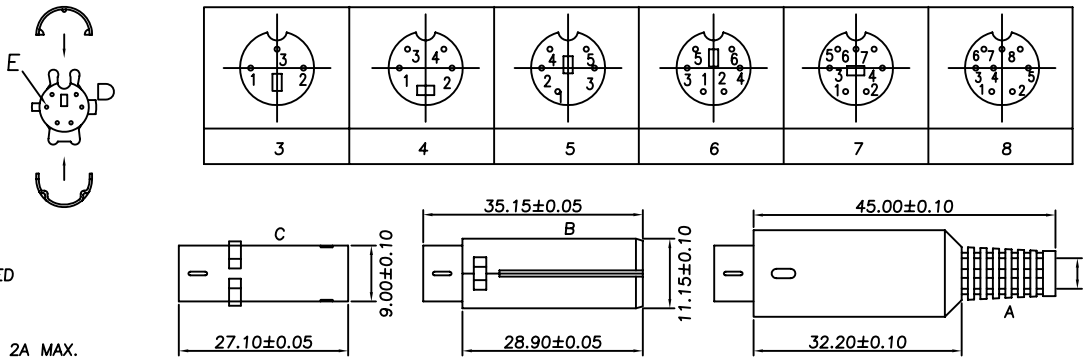
MDJB1-F99-06



MATERIAL
INSULATOR: PBT UL94V-0
CONTACT: Phosphor Bronze, Gold/Tin plated
ELECTRICAL
CONTACT CURRENT RATING: 1 Amp
DIELECTRIC WITHSTANDING : AC 1000V min. Per minute
INSULATION RESISTANCE: 500MΩ min.at 500V DC
CONTACT RESISTANCE: 30mΩ Max
OPERATING TEMPERATURE: -55°~+105°

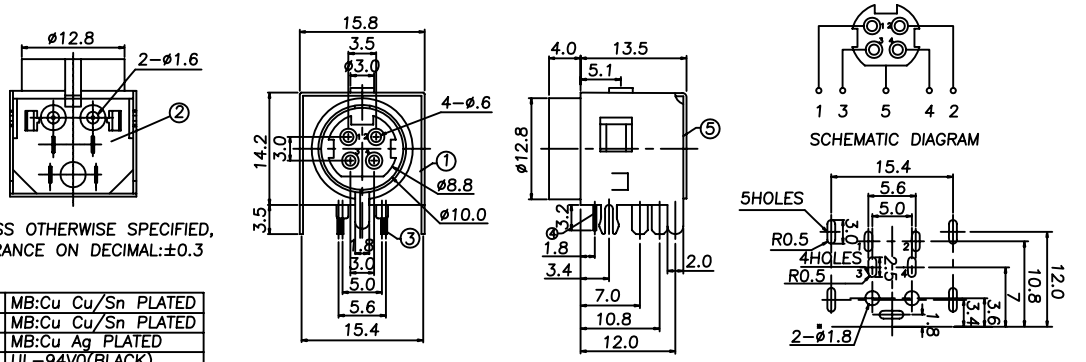
Part No.	A COLOR	B COLOR	SHELL PLATING
MDJB1-F99-06	GREEN	PURPLE	TIN PLATED

MDA-P-xx



MATERIAL:
A.COVER: PE+2L
B.SHELL: ABS
C.METAL SHIELD: BRASS NICKEL PLATED
D.HOUSING: NYLON66+GF
E.CONTACT: BRASS SILVER PLATED
SPECIFICATIONS:
1.RATING:11V AC 1A MAX OR 12V DC 2A MAX.
2.INSULATION RESISTANCE: 50M OHM MIN AT 500V DC.
3.DIELECTRIC STRENGTH: 500V AC / 1 MINUTE.

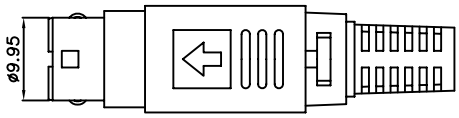
MDP-JRM-04

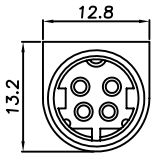


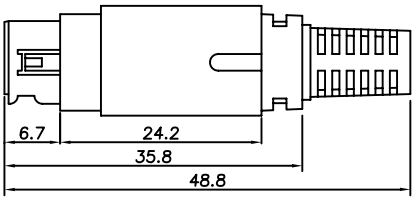
UNLESS OTHERWISE SPECIFIED,
TOLERANCE ON DECIMAL:±0.3

LTR	PART NAME	QTY	MATERIAL	REMARK
5	COAT	1	SPCC t=0.4	MB:Cu Cu/Sn PLATED
4	GROUD CONTACT	1	C2680 t=0.4	MB:Cu Cu/Sn PLATED
3	TERMINAL	4	C2680 t=0.3	MB:Cu Ag PLATED
2	COVER	1	PBT 4815	UL-94V0(BLACK)
1	HOUSING	1	PBT 4815	UL-94V0(BLACK)

MDP-PA-04



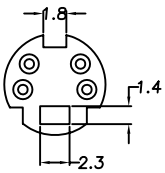


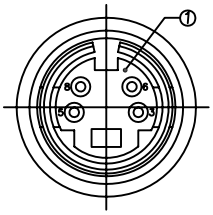


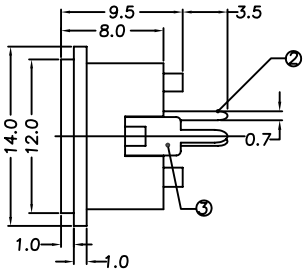
MATERIAL:
1.PLASTIC COVER:ABS
2.SHELL: BRASS
3.CAP: BRASS
4.CABLE FIXER: BRASS
5.HOUSING:PBT
6.PIN: BRASS
7.POM RING:POM
8.SPRING: STEEL
9.PLASIC TUBE:ABS
10.SR:PVC

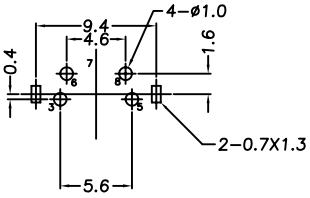
SAFETY:
1.RATING: 100V AC MAX or 12V DC 2A MAX
2.INSULATION RESISTANCE: 50M ohm MIN at 250V DC
3.WITHSTANDING: 250V AC at 1 MINUTE

MDD-S-04





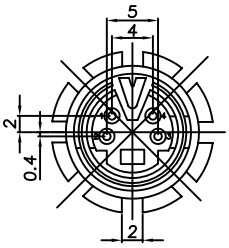


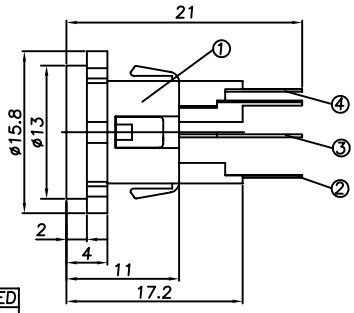


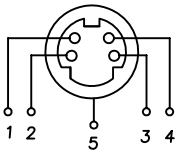
Recommended PCB Layout
[BOTTOM VIEW]

ITEM	NAME	MATERIAL	FINISH	Q'TY	NOTE
3	GROUND	BRASS	Ni	1	40T
2	CONTACT	PBS	Au+Tin	4	20T
1	HOUSING	PBT	15	1	UL94V-0

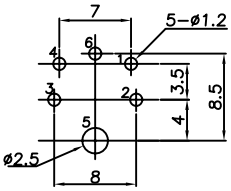
MDD-SPA-04







SCHEMATIC DIAGRAM



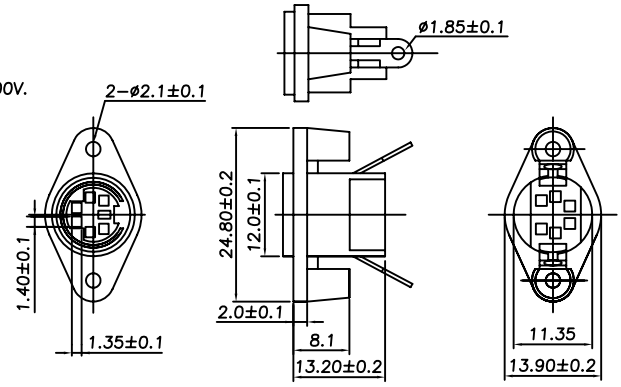
T:1.6 Dimensions of PC board holes
Tolerance : ±0.1(Printed-top view)

LTR	PART NAME	QTY	MATERIAL	REMARK
4	EARTH TERMINAL	1	BRASS t=0.25	MB:Cu Cu/ Sn PLATED
3	TERMINAL	4	C5191 t=0.35	MB:Cu Ag PLATED
2	GROUND CONTACT	1	C2680 t=0.35	MB:Cu Cu/Sn PLATED
1	HOUSING	1	PBT 4815	UL-94V0(BLACK)

MDC-SPBE-xx

ELECTRICAL CHARACTERISTICS:
CONTACT CURRENT RATING: 1 AMPERES.
DIELECTRIC WITHSTANDING VOLTAGE: AC 500V R.M.S
INSULATION RESISTANCE: 500 MEGOHMS MINIMUM AT DC 500V.
CONTACT RESISTANCE: 30 MILLIOHMS MAXIMUM.
OPERATING TEMPERATURE: -55°C TO +105°C.

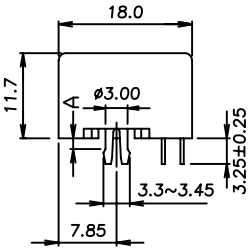
MATERIALS:
CONTACT: BRASS.
INSULATOR: P.B.T. UL 94-V0 RATED.
SHELL: BRASS.

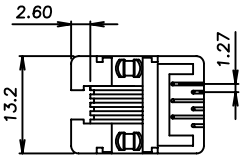


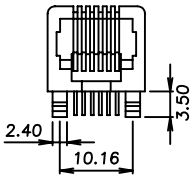
CONTACT	3	4	5	6	7	8
PART NO.	MDC-SPBE-03	MDC-SPBE-04	MDC-SPBE-05	MDC-SPBE-06	MDC-SPBE-07	MDC-SPBE-08
POSTTION						

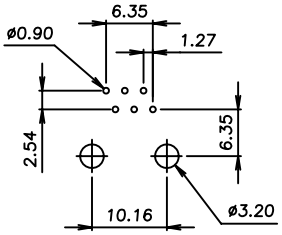
Modular Jack Connector

MJ11-KX06-0606





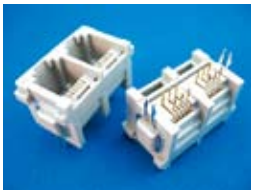


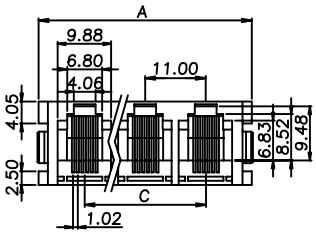


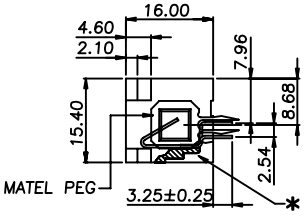
PC Board Layout

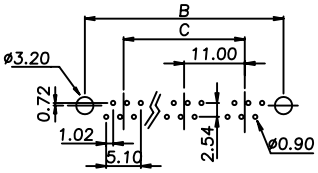
MATERIAL:
HOUSING–PBT POLYESTER UL94V–0
MIXED GLASS FIBER.
STANDARD COLOR–BLACK
CONTACTS–0.45mm DIAMETER PHOS–BRONZE
PLATED WITH HARD GOLD.
CAVITY CONFIRMS TO FCC RULES AND REGULATIONS

MJD15Ax-GE06Z-0606

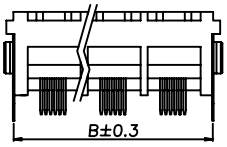








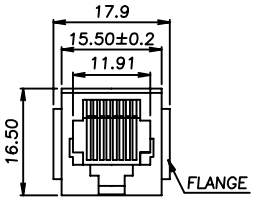
PC Board Layout

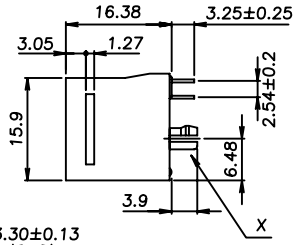


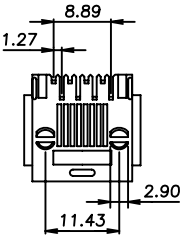
DIMENSION	NO. OF JACK							
	1	2	3	4	5	6	7	8
A	17.00	28.00	39.00	50.00	61.00	72.00	83.00	94.00
B	13.8	24.8	35.8	46.8	57.8	68.8	79.8	90.8
C	0	11.00	22.00	33.00	44.00	55.00	66.00	77.00

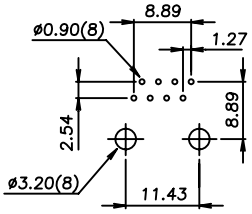
MATERIAL:
HOUSING–PBT POLYESTER UL94V–0
MIXED GLASS FIBER. STANDARD COLOR–GARY.
CONTACTS–0.45mm DIAMETER PHOS–BRONZE
PLATED WITH HARD GOLD.
MTEAL PEG–0.50mm THICK PHOS–BRONZE
PLATED WITH TIN/LEAD.
CAVITY CONFIRMS TO FCC RULES AND REGULATIONS
PART 68,SUBPART F.

MJD16-KE06-0808

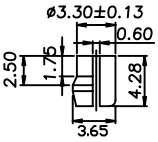








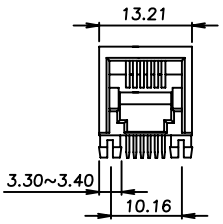
PC Board Layout
Ref.



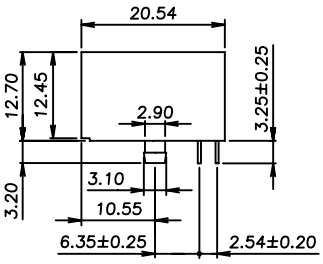
DETAIL X

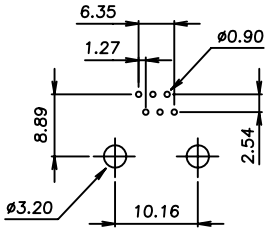
MATERIALS:
HOUSING–PBT POLYESTER UL94V–0
MIXED GLASS FIBER.
STANDARD COLOR–BLACK
CONTACTS–0.45mm DIA. ROUND PHOS–BRONZE
PLATED WITH HARD GOLD.
CAVITY CONFIRMS TO FCC RULES AND REGULATIONS

MJ12L-KX06-0606

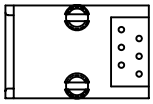


FLANGELESS



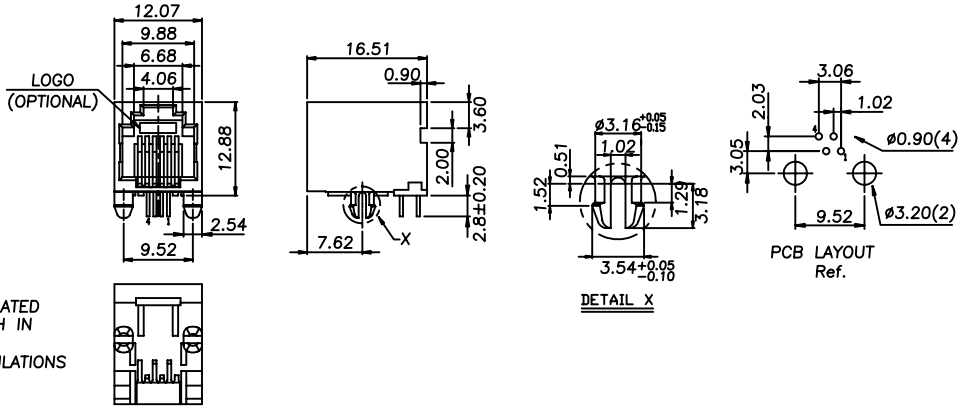


PC Board Layout



MATERIALS:
· HOUSING–PBT POLYESTER UL94V–0
MIXED GLASS FIBER.
STANDARD COLOR–BLACK
· CONTACTS–0.45mm DIA. ROUND PHOS–BRONZE
PLATED WITH HARD GOLD.
CAVITY CONFIRMS TO FCC RULES AND REGULATIONS
PART 68,SUBPART F.

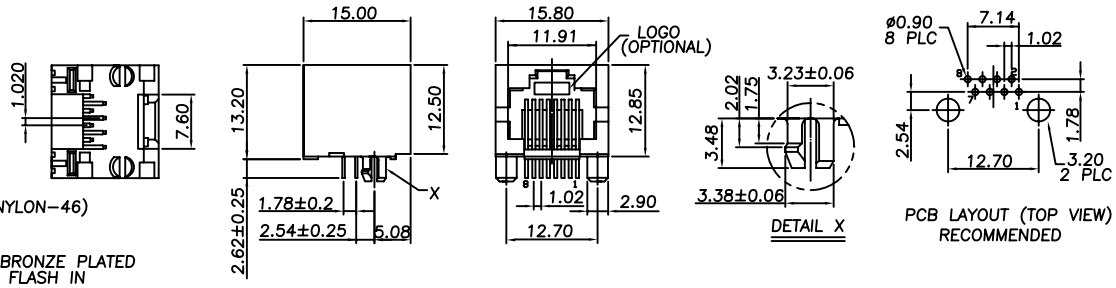
MJ12U-KX06-0604



MATERIALS:
- HOUSING–DSM STANYL TE250F6 (NYLON–46)
  HEAT DEFLECTION TEMP.290°
  BLACK COLOR, UL94V–0
- CONTACTS –0.35mm THICK PHOS–BRONZE PLATED WITH HARD GOLD AND GOLD FLASH IN SOLDER AREA.

CAVITY CONFIRMS TO FCC RULES AND REGULATIONS PART 68,SUBPART F.

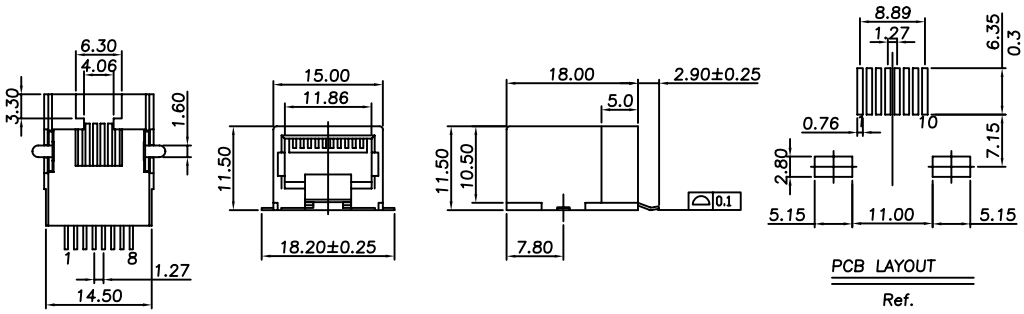
MJ13U-KX06-0808



MATERIAL:
- HOUSING–DSM STANYL TE250F6 (NYLON–46)
  HEAT DEFLCTION TEMP.290°
  BLACK COLOR, UL94V–0
- CONTACTS –0.35mm THICK PHOS–BRONZE PLATED WITH HARD GOLD AND GOLD FLASH IN SOLDER AREA.

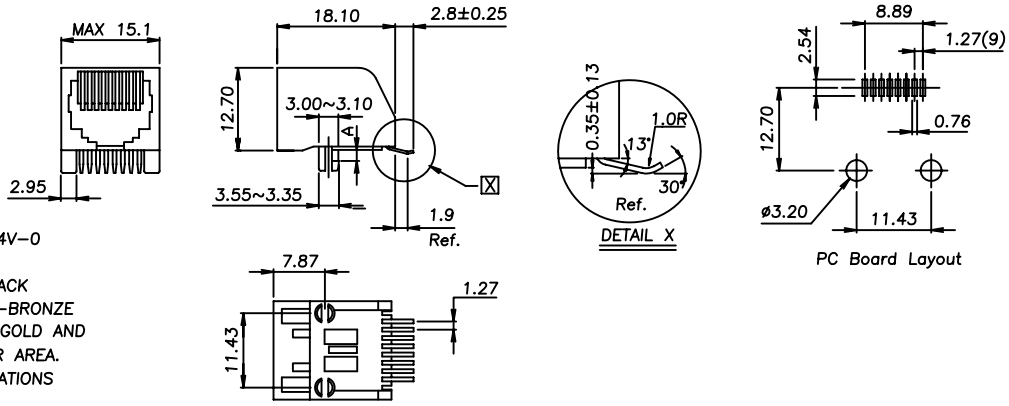
CAVITY CONFIRMS TO FCC RULES AND REGULATIONS PART 68,SUBPART F.

MJW11-KX06-0808



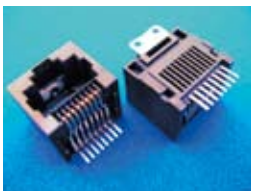
MATERIAL:
HOUSING–DSM STANYL TE250F6 (NYLON–46)
BLACK COLOR, UL94V–0
CONTACTS–0.35mm THICK PHOS–BRONZE PLATED WITH HARD GOLD AND GOLD FLASH IN SOLDER AREA.
HOLD DOWN–0.30mm THICK COPPER ALLOY, PLATED WITH TIN.
CAVITY CONFIRMS TO FCC RULES AND REGULATIONS PART 68,SUBPART F.

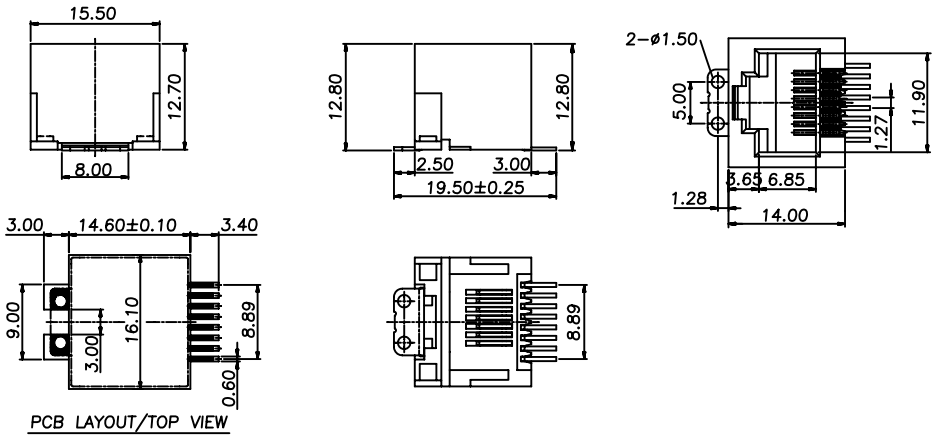
MJW12J-KX06P-0808



MATERIAL: HOUSING NY–46 POLYESTER UL–94V–0
MIXED GLASS FIBER.
STANDARD COLOR–BLACK
CONTACTS–0.35mm THICK PHOS–BRONZE PLATED WITH HARD GOLD AND TIN/LEAD IN SOLDER AREA.
CAVITY CONFIRMS TO FCC RULES AND REGULATIONS PART 68,SUBPART F.

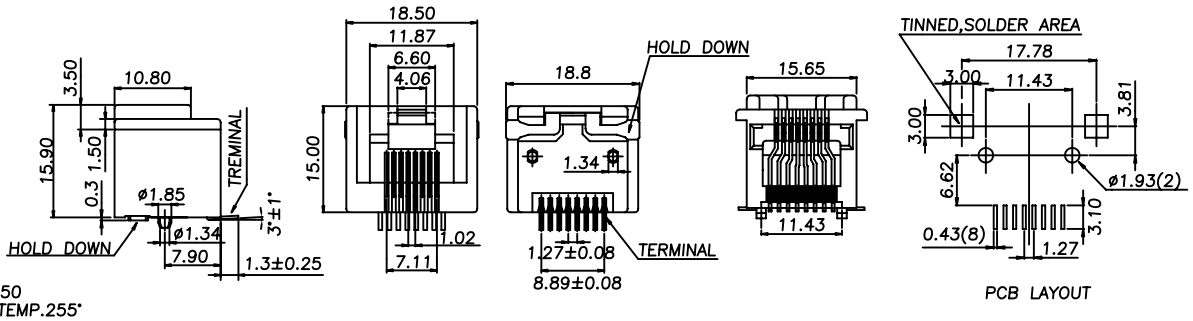
MJV12-KX06-0808





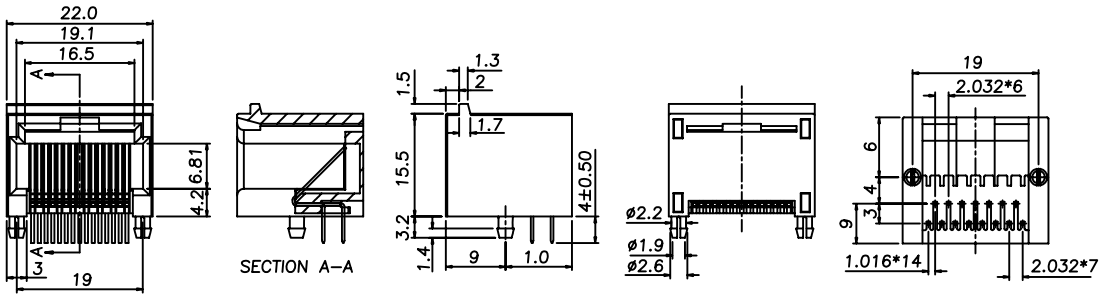
MATERIAL:
HOUSING: NYLON-46 W/GLASS FIBER
POLYESTER UL94V-0 STANDARD
COLOR BLACK
GOLD PLATING:SELECTIVE GOLD PLATING

MJVS14-KE06EP-0808



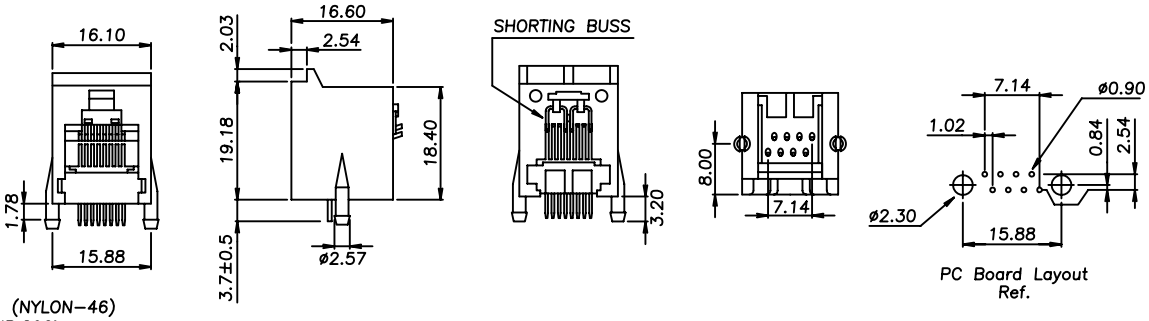
MATERIALS:
HOUSING-NYLON ZYTEL FR-50
HEAT DEFLECTION TEMP.255°
BLACK COLOR, UL 94V-0

MJ17-KX06-1515



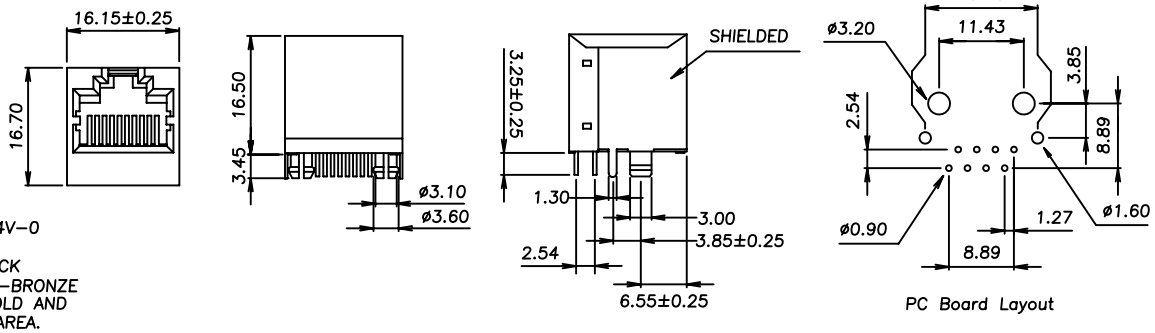
MATERIAL:
HOUSING Material:Polycarbonate,
UL 94V-2
Material Contact:Phosphor Bronze.
Operation Temperature:-40°C ~ 80°C
Cable to Tensile Strength:7Kgs

MJ21-GX06SB-0808



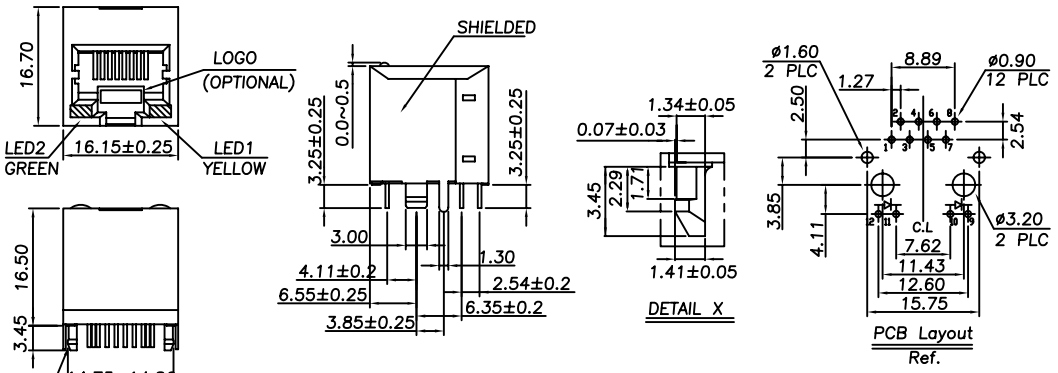
MATERIALS:
HOUSING:DSM STANYL TE250F6 (NYLON-46)
HEAT DEFLECTION TEMP.290°
BLACK COLOR, UL94V-0

MJDF16-KX06B38-0808



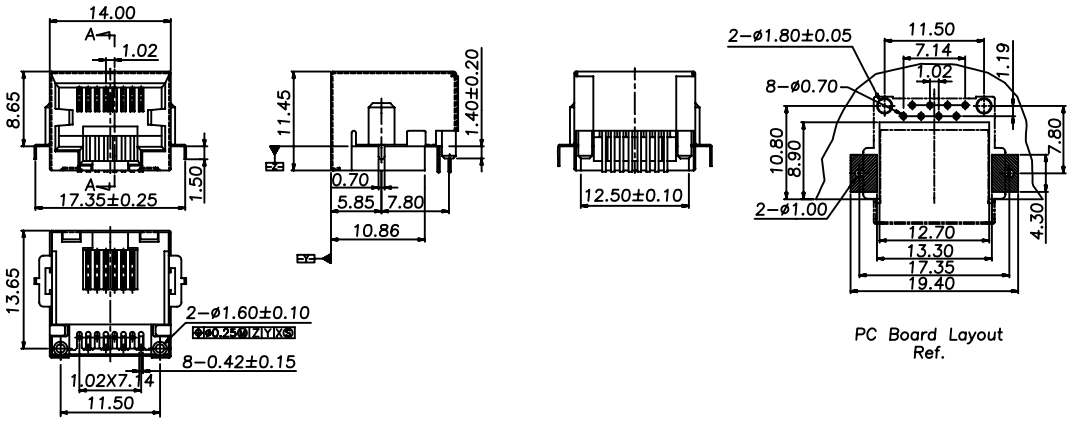
MATERIAL:
HOUSING–PBT POLYESTER UL–94V–0
MIXED GLASS FIBER.
STANDARD COLOR–BLACK
CONTACTS–0.35mm THICK PHOS–BRONZE
PLATED WITH HARD GOLD AND
TIN/LEAD IN SOLDER AREA.
SHIELD–0.25mm THICK COPPER ALLOY,
PLATED WITH TIN/LEAD.

MJDF16L-KX06B38GY-0808

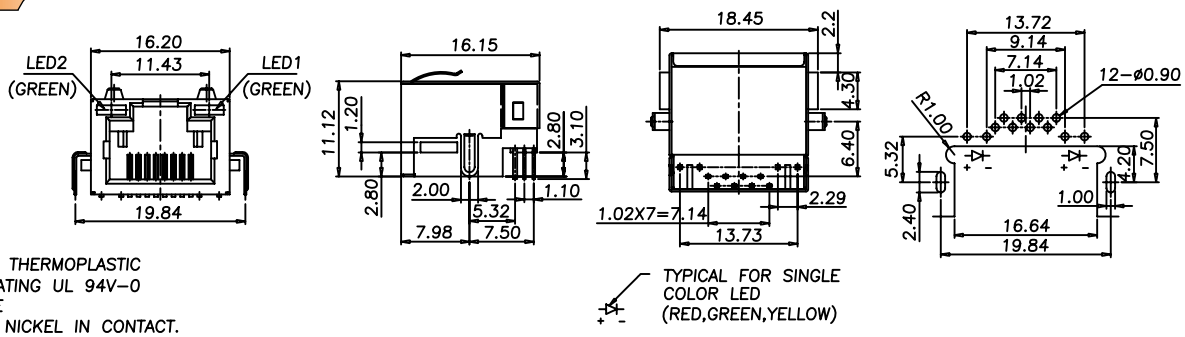


MATERIAL:
HOUSING–PBT POLYESTER UL94V–0
MIXED GLASS FIBER.
STANDARD COLOR–BLACK
CONTACTS–0.35mm THICK PHOS–BRONZE
PLATED WITH HARD GOLD AND
GOLD FLASH IN SOLDER AREA.
SHIELD–0.25mm THICK COPPER ALLOY,
PLATED WITH NICKEL.

MJF08-KX06-0808



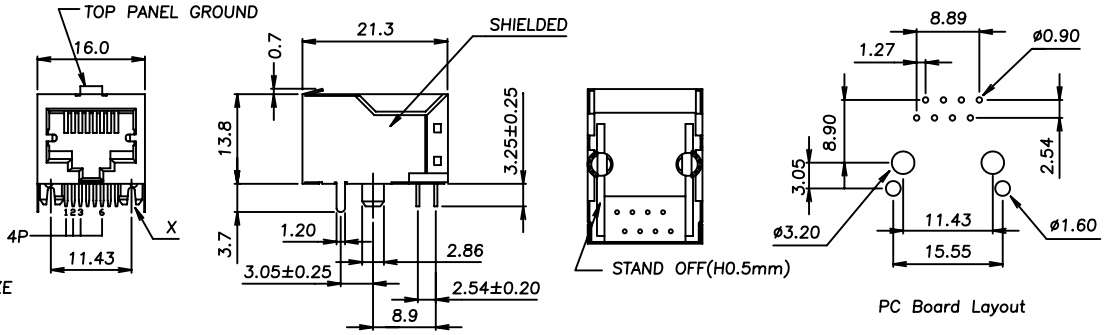
MJF08UL-KT06GG-0808



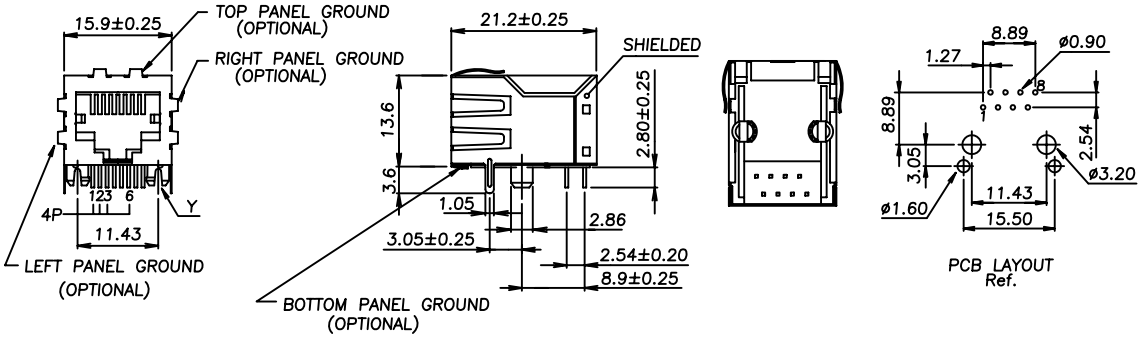
MATERIAL:
PLASTIC HOUSING:HIGH TEMP, THERMOPLASTIC
FLAMMABILITY RATING UL 94V–0
CONTACTS:PHOSPHOR BRONZE
PLATING:GOLD PLATING OVER NICKEL IN CONTACT.
TIN PLATING OVER NICKEL IN SOLDER AREA.
SHIELD:BRASS PLATING NICKEL ALLOY.

MJF13-KT06A3-0808

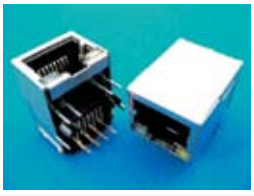
MATERIAL:
HOUSING:PBT POLYESTER UL94V-0
MIXED GLASS FIBER.
STANDARD COLOR-BLACK
CONTACTS: 0.45mm DIA. PHOS-BRONZE
PLATED WITH HARD GOLD.
SHIELD:0.25mm THICK COPPER ALLOY,
PLATED WITH TIN/LEAD OR NICKEL.

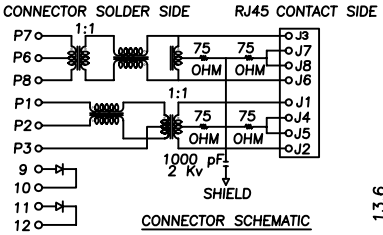


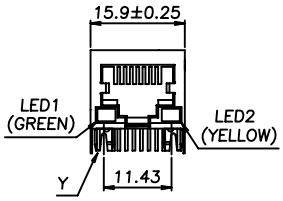
MJF13-KF06A3-0808



MJF13T36L-KX06B3GY-0808



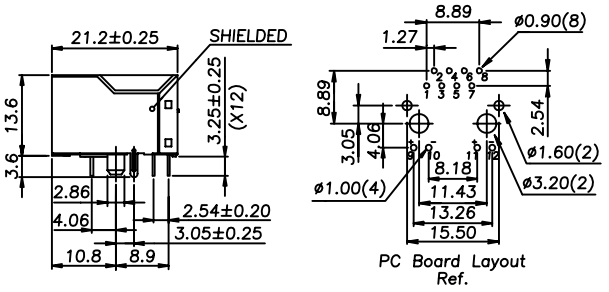




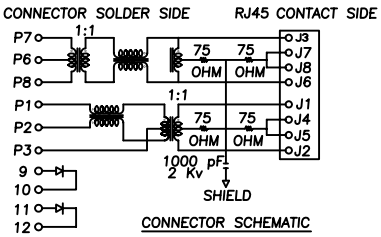
Specification :

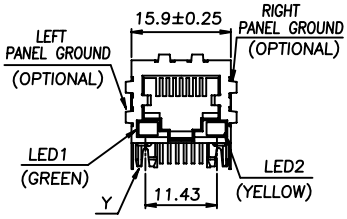
Item	Parameter	Condition	Min.	Typ.	Max.	Unit	REMARK
1	Insertion loss	1-100 MHz			-1	dB	
2	Return loss	1-30 MHz	-16			dB	NOTE 1
		30-60 MHz				dB	
		60-80 MHz	-10			dB	
3	OCL	100 KHz	350			mH	
4	Crosstalk	1-100 MHz	-35			dB	
5	Hipot	Vrms	1.5			kV	
6	Turns Ratio (Chip : Cable)	TX: 1 : 1 RX: 1 : 1				CT	
7	Direct Current resistance					Ω	

✱ NOTE 1: Greater than (16-20 Log (f/30MHZ)) dB.



MJF13T36L-KF06B3GY-0808

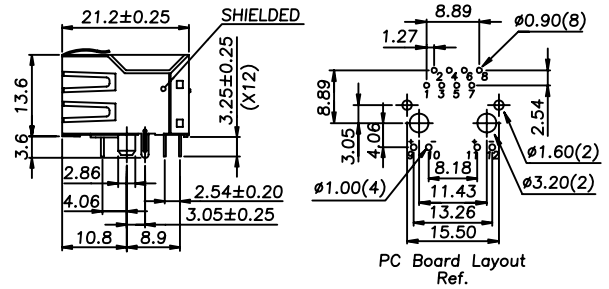




Specification :

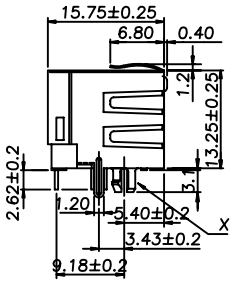
Item	Parameter	Condition	Min.	Typ.	Max.	Unit	REMARK
1	Insertion loss	1-100 MHz			-1	dB	
2	Return loss	1-30 MHz	-16			dB	NOTE 1
		30-60 MHz				dB	
		60-80 MHz	-10			dB	
3	OCL	100 KHz	350			mH	
4	Crosstalk	1-100 MHz	-35			dB	
5	Hipot	Vrms	1.5			kV	
6	Turns Ratio (Chip : Cable)	TX: 1 : 1 RX: 1 : 1				CT	
7	Direct Current resistance					Ω	

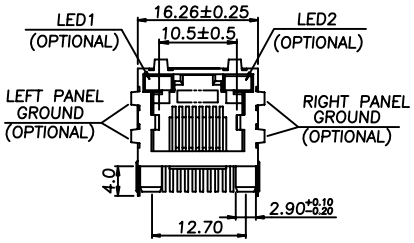
✱ NOTE 1: Greater than (16-20 Log (f/30MHZ)) dB.

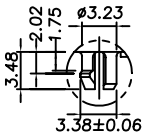


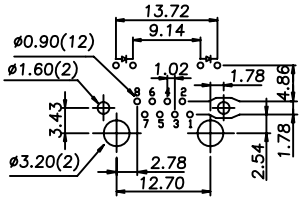
MJF13UL-KF06B3YG-0808

MATERIALS:
HOUSING:
DSM STANYL TE250F6
(NYLON-46)
HEAT DEFLECTION TEMP.290°
BLACK COLOR,UL94V-0







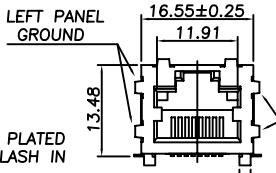


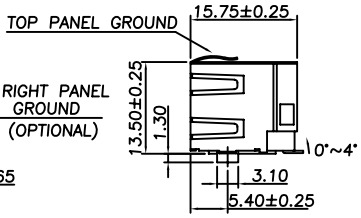
PCB LAYOUT

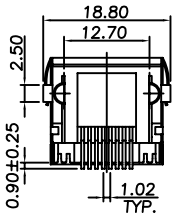
MJWF13U-KF06EP-0808

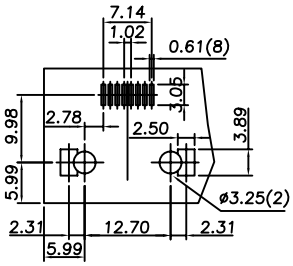
MATERIAL:
· HOUSING-DSM STANYL TE250F6 (NYLON-46)
HEAT DEFLCTION TEMP.290°
BLACK COLOR, UL94V-0

CONTACTS:
0.35mm THICK PHOS-BRONZE PLATED WITH HARD GOLD AND GOLD FLASH IN SOLDER AREA.
SHIELD:
0.25mm THICK COPPER ALLOY, PLATED WITH NICKEL.



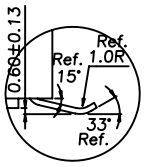




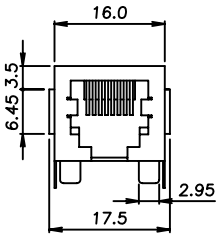


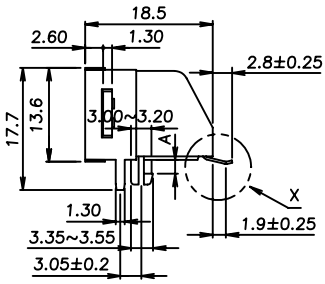
PCB LAYOUT
Ref.

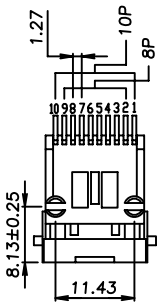
MJWM13-KE06A3-0808

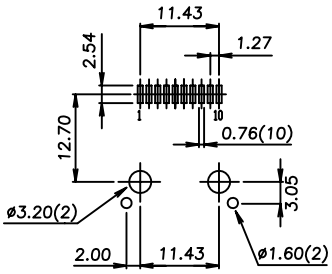


DETAIL X



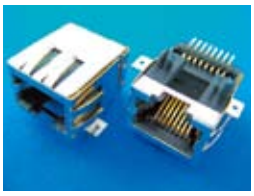


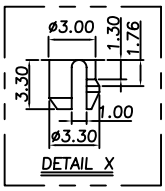




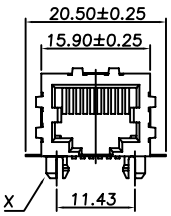
PC Board Layout
Ref.

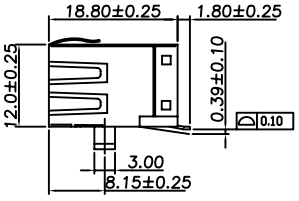
MJWF12-KF06P-0808

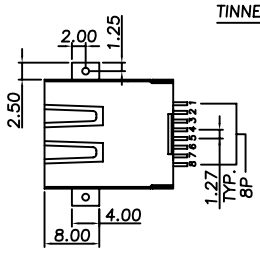


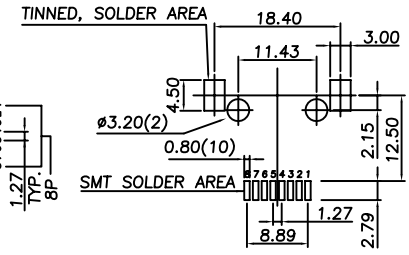


DETAIL X



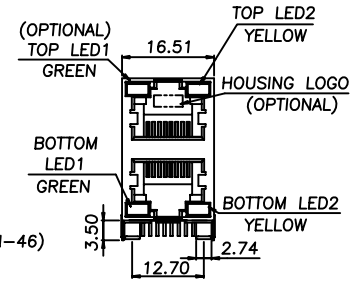


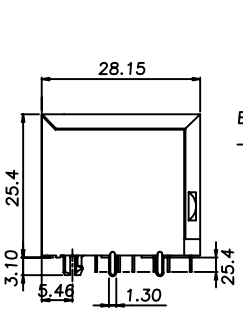


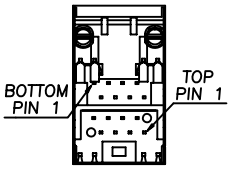


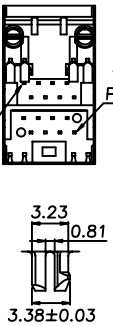
PCB LAYOUT

MJF25ULB1-KX06B7GY-0808

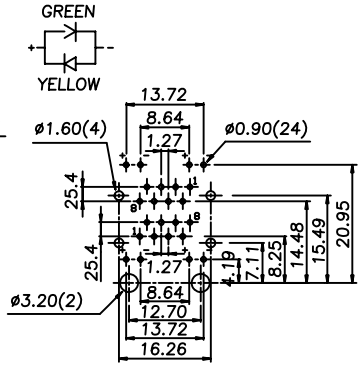








DETAIL X

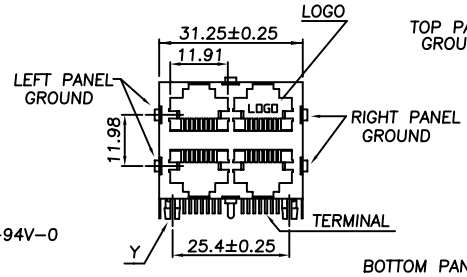


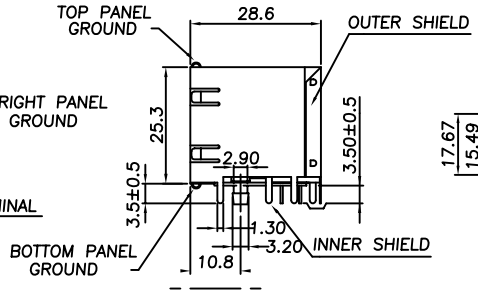
PCB LAYOUT
Ref.

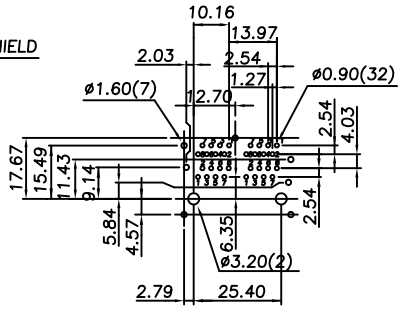
MATERIAL
HOUSING:
DSM STANYL TE250F6 (NYLON-46)
HEAT DEFLCTION TEMP.290°
BLACK COLOR, UL94V-0

CONTACTS:
0.35mm THICK PHOS-BRONZE PLATED WITH HARD GOLD AND GOLD FLASH IN SOLDER AREA.

MJF25B2-KF06A4-0808



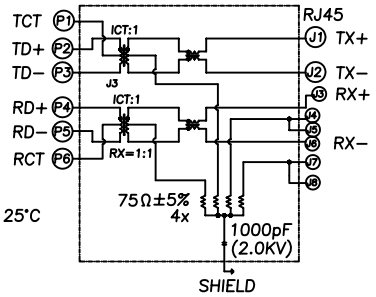


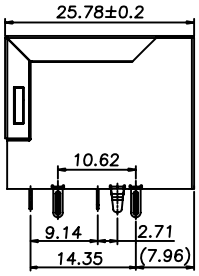


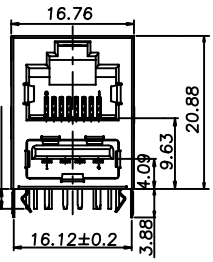
PCB LAYOUT

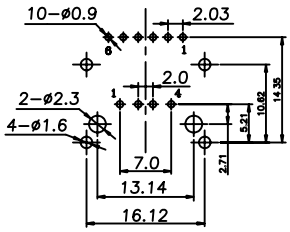
MATERIAL:
HOUSING:PBT POLYESTER UL-94V-0
MIXED GLASS FIBER.
STANDARD COLOR-BLACK
CONTACTS:0.35mm THICK PHOS-BRONZE PLATED WITH HARD GOLD AND GOLD FLASH IN SOLDER AREA.
SHIELD:0.25mm THICK COPPER ALLOY, PLATED WITH NICKEL.

MUJT16U-KX06-86A1







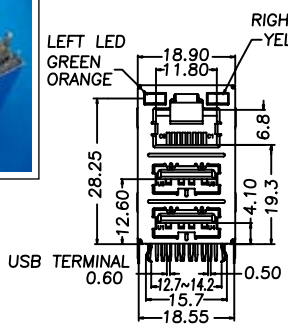


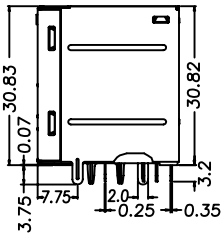
PCB LAYOUT/TOP VIEW

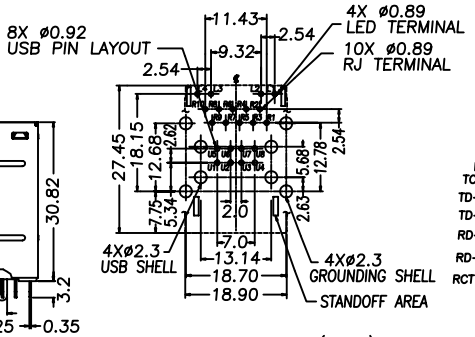
ELECTRICAL CHARACTERISTICS @ 25°C

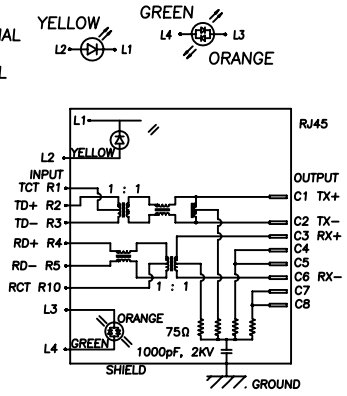
TX	LCT:1	
RX	LCT:1	
OCL: @100KHz/100m VRMS		
8mA DC BLAS	350uH MIN	
INC. LOSS		
1MHz TO 100MHz	-1.0dB MAX	
RET.LOSS(MIN)		
1MHz-30MHz	-18dB	
30MHz-60MHz	-18+200LOG(F/30MHz)dB	
60MHz-80MHz	12dB	
CROSS TALK (TX-RX)		
50KHz-100MHz	-35dB MIN	
CM TO CM REJ		
100KHz-100MHz	-30dB MIN	
CM TO DM REJ		
100KHz-100MHz	-40dB MIN	
HIPOT (Isolation voltage:1500Vums		

MUJT10UL-KX03GDYX-88AA





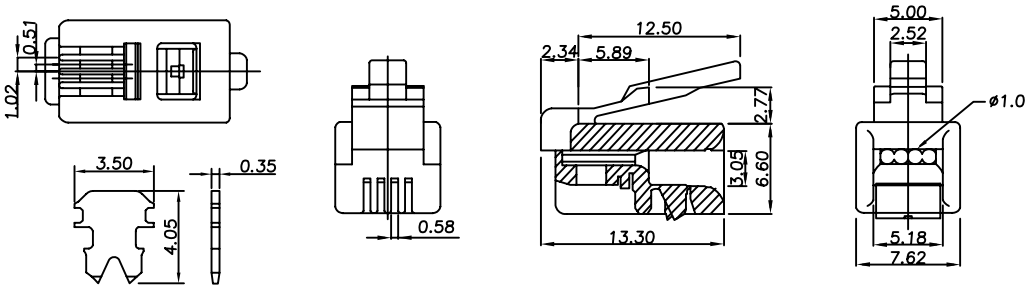




RECOMMENDED PCB LAYOUT(8P10C)
COMPONENT SIDE PCB THICKNESS:1.60mm
ALL DIMENSION TOLERANCE ARE ±0.05
UNLESS OTHERWISE SPECIFIED

Modular Plug Connector

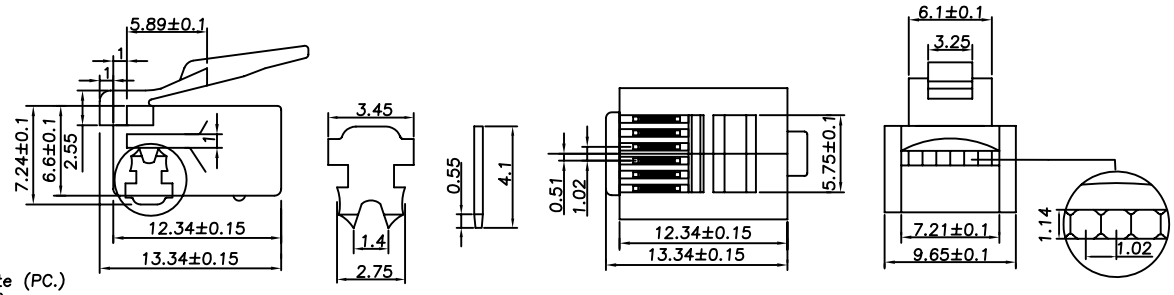
MP-F-0404



MECHANICAL:
Housing material:Polycarbonate (PC.)
94V-0 (For UL 1863 DUXR2)
94V-2 (For UL 498 ECBT2)
OPERATING TEMPERATURE: -40°C~125°C

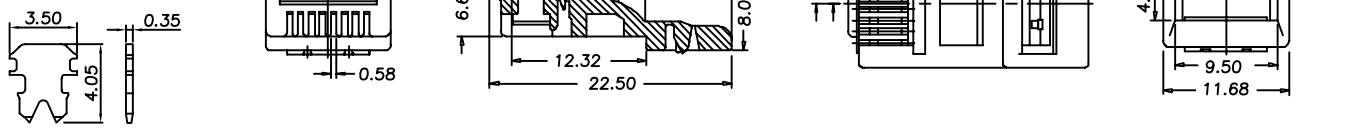
2 PRONGS FOR STRANDED WIRE
多芯線用二叉型金片

MP-R-0606



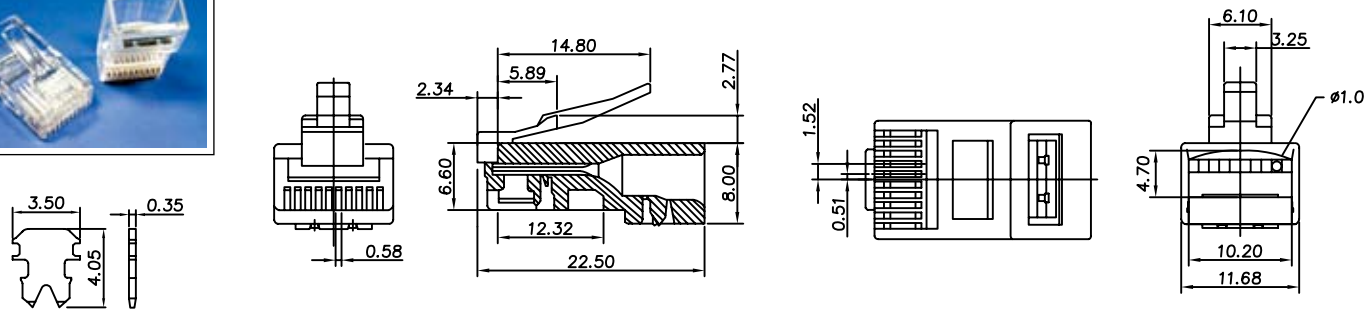
MECHANICAL:
Housing material:Polycarbonate (PC.)
94V-0 (For UL 1863 DUXR2)
94V-2 (For UL 498 ECBT2)
OPERATING TEMPERATURE: -40°C~125°C

MP-R-0808



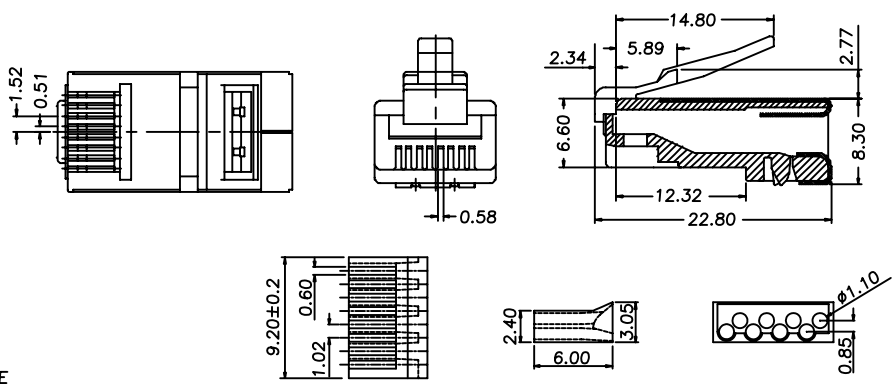
2 PRONGS FOR STRANDED WIRE
多芯線用二叉型金片

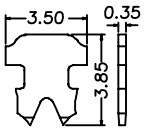
MP-R-1010



2 PRONGS FOR STRANDED WIRE
多芯線用二叉型金片

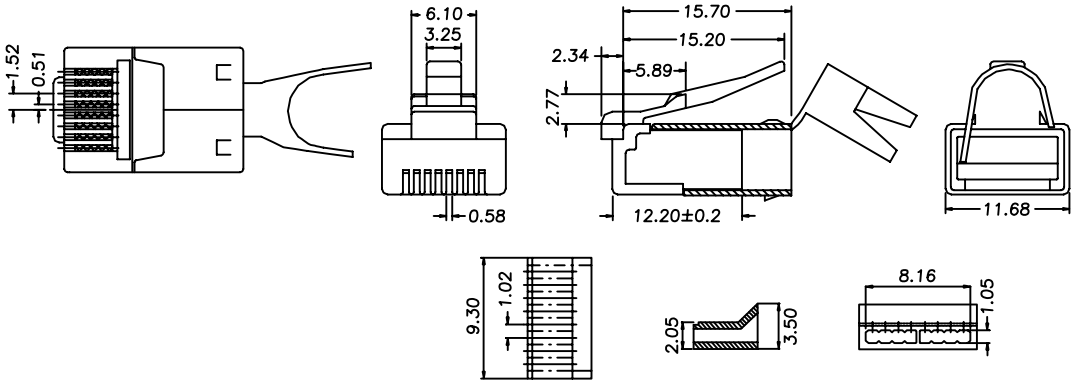
MP-RF6-0808

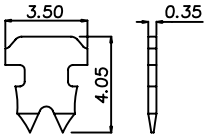




2 PRONGS FOR STRANDED WIRE
多芯線用二叉型金片

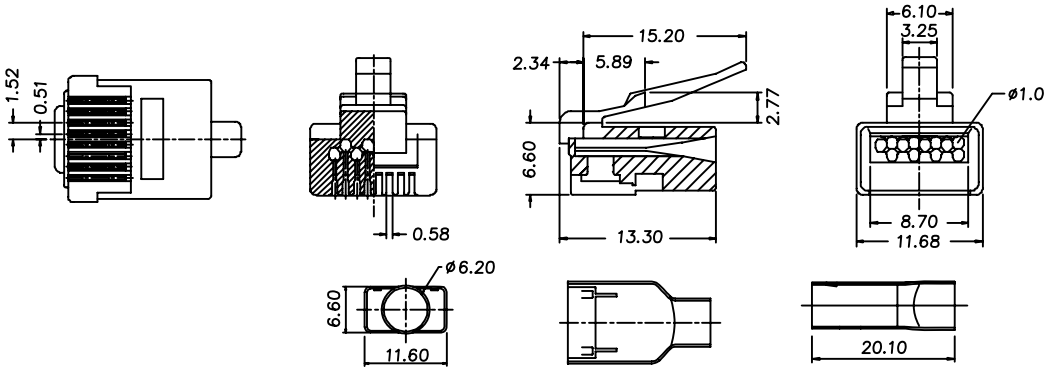
MP-RMS5-0808

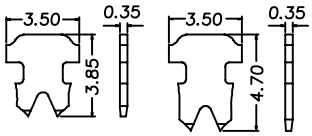




2 PRONGS FOR STRANDED WIRE
多芯線用二叉型金片

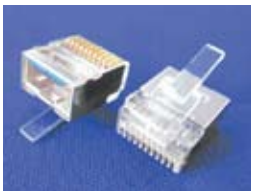
MP-RSM-0808



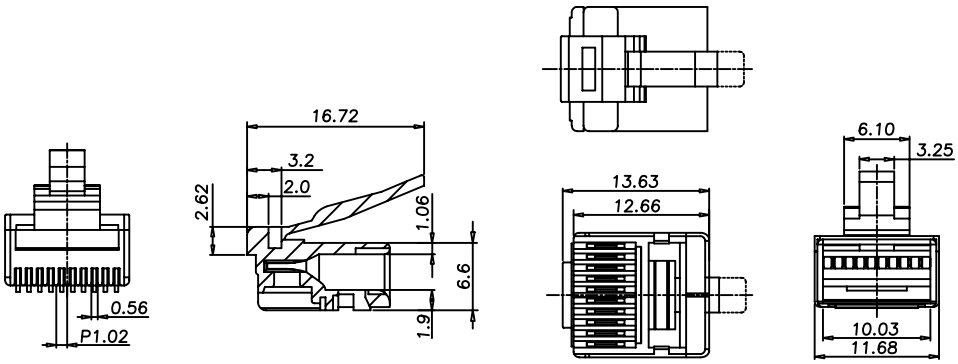


2 PRONGS FOR STRANDED WIRE
多芯線用二叉型金片

MP-FSF-1010

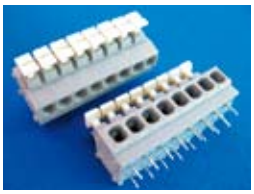


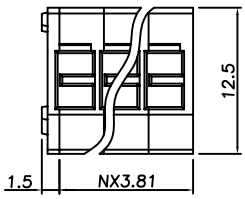
SPECIFICATION
1.Housing Material:Polycarbonate,UL 94V-2
No Poison
2.Material Contact :Phosphor Bronze
3.Housing Color :Transparence
4.Operation Temperature:-40°C ~ 80°C
5.Cable to Tensile Strength:7.7Kgs.

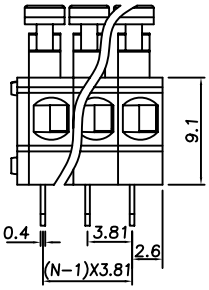


3.81mm Connector

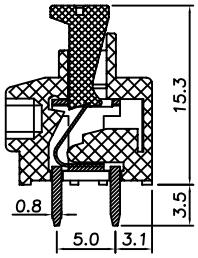
TBX038-R15-xx

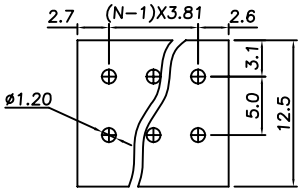






N=Number of contacts

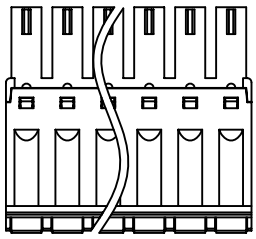


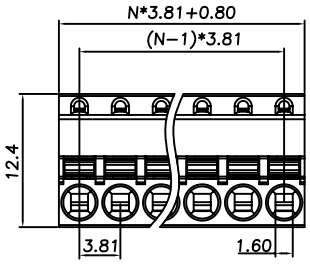


P.C.B LAYOUT

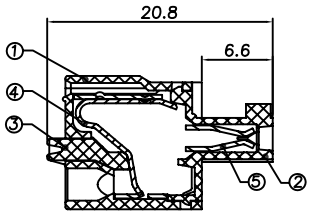
Material
Terminal body (Contact pin): Brass
Insulator (housing): Thermoplastic (UL94V−0)
Wire range:
Solid wire(AWG): 16−20
Stranded wire(AWG): 16−20

TBX038-SWC-xx



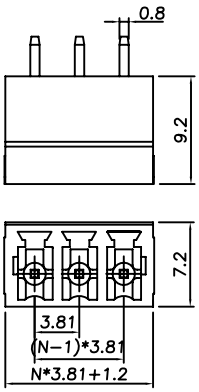


N=Number of contacts

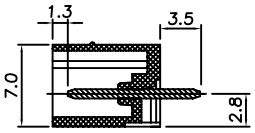


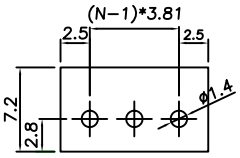
Material
Insulating body Thermoplastic (UL94V−0)
Contacts PIN PhBz (CuSn) Tin plated
Solid wire(AWG): 20−28
Stranded wire(AWG): 20−28

TBH038-PDC-xx



N=Number of contacts





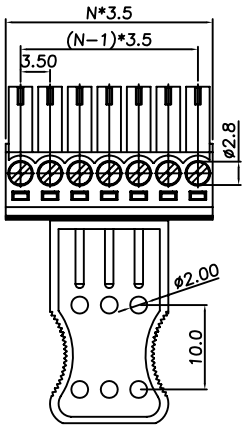
P.C.B. LAYOUT

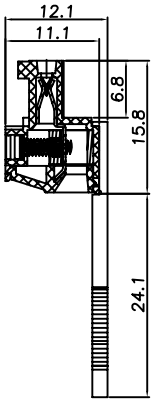
Material:
Solder Pin: Brass with Tin plated
Insulator body(housing): Polyamide(Glass filled)(UL94V−0)
Electrical
Voltage rating: 125VAC
Current rating: 8A.
Insulation resistance: 500MΩ at DC 500V
Withstanding Voltage: AC 1200V(1min)
Mechanical:
Using temperature Range: −40°C to +105°C
Soldering temperature:+250°C ,5seconds Max.

TBH038-SWCH-xx

Electrical

- Voltage rating: 300VAC/125VAC/125VAC
- Current rating: 10A/8A/10.5A
- Wire range: 1.5mm^2
- Solid wire(AWG): 16−26/16−26
- Stranded wire(AWG): 16−26/16−26
- Torque: 3Lb−In/3.5kgf.cm/0.2Nm
- Screw: M2
- Wire strip length: 6−7mm
- Withstanding Voltage: 1.6KV/1.6KV/2.5KV
- Operating temperature: −30°C to +105°C





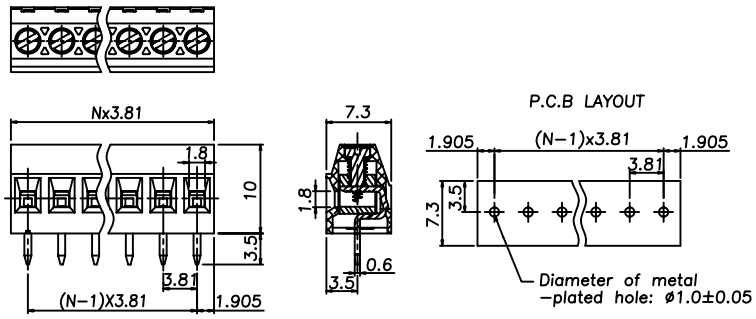
Material

- Terminal body (metal housing): Brass(CuZn)
- Terminal screw: Steel Zinc plating "−" slot type
- Wire guard: PhBz ,Tin plated
- Insulator (housing): Thermoplastic (UL94V−0)

TBH038-D10-xx

Electrical
Voltage rating: 300VAC
Current rating: 10 Amps/way max
Contact resistance: 20mΩ (max)
Insulation resistance: 5000MΩ /1000V
Withstanding Voltage: 1500VAC(1min)
Test time=60sec/1pcs
Wire range: 16–30AWG

Material:
Contact(metal housing): Brass (CuZn)
Insulator body(housing): Polyamide(Glass filled)(UL94V–0)
Terminal screw:Steel galvanized and achromatized or Nickel plated or Tin plated(standard)(optian)

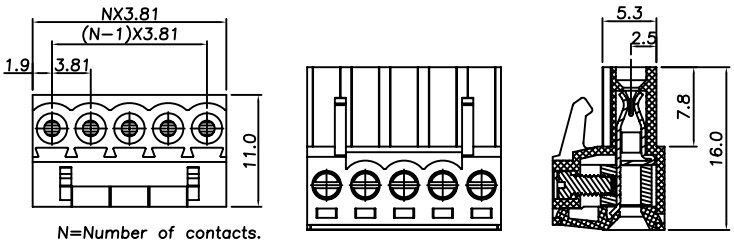


N=Number of contacts

TBH038-SW-xx

Electrical
Voltage rating: 300VAC
Current rating: 8Amps/way max
Contact resistance: 20m (max)
Insulation resistance: 5000MΩ /1000V
Withstanding Voltage: 1500VAC(1min)
Test time=60sec/1pcs
Wire range: 16–28AWG
Mechanical:
Torque: 2kgf.cm/M2
Operating temperature: –30°C to +105°C

Technical Data:
Material:
Contact(metal housing): Brass Machined(Option)
Terminal screw: Steel Galvanized and chromatized
Wire guard: PhBZ,Tin plated.
Insulator body(housing): Polyamide(Glass filled)(UL94V–0)

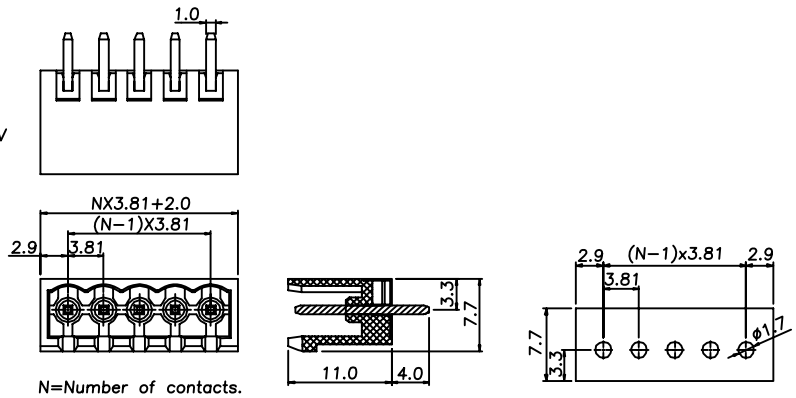


N=Number of contacts.

TBH038-PDB-xx

Electrical
Voltage rating: 300VAC
Current rating: 8 Amps/way max
Contact resistance: 20mΩ (max)
Insulation resistance: 500MΩ at DC 500V
Withstanding Voltage: 1500VAC(1min)

Technical Data:
Material:
Solder pin: Brass with Tin plated
Insulator body(housing): Polyamide(Glass filled)(UL94V–0)
Mechanical:
Operating temperature: –30°C to +105°C
Soldering temperature:+245°,5seconds Max.



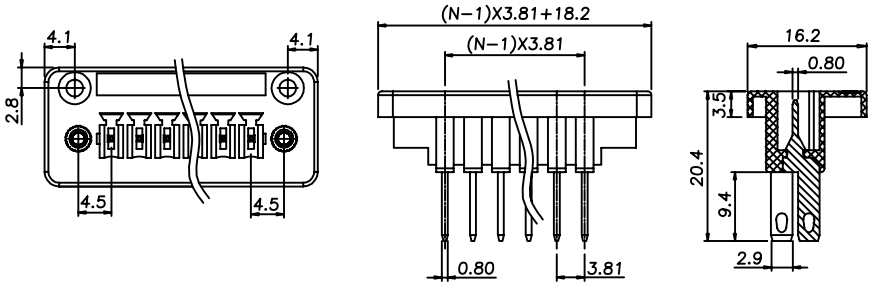
N=Number of contacts.

P.C.B LAYOUT

TBH038-PSCF-xx

Electrical
Voltage rating: 300VAC
Current rating: 10A

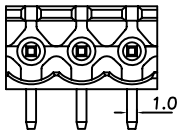
Technical Data:
Material:
Solder pin: Brass with Tin plated
Flange screw nut: brass M2.5
Insulator body(housing): Polyamide(Glass filled)(UL94V–0)
Mechanical:
Operating temperature: –30°C to +105°C
Soldering temperature:245°C±10°C,5seconds Max.

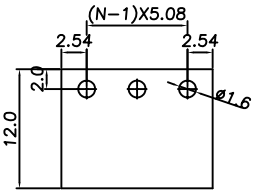


N=Number of contacts.

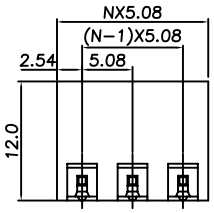
TBH051-PR-xx

Technical Data:
Material:
Solder Pin: Brass with Tin plated
Insulator body(housing): Polyamide(Glass filled)(UL94V-0)

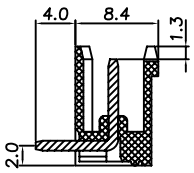




PCB. LAYOUT



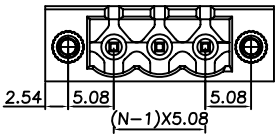
N=Number of contacts



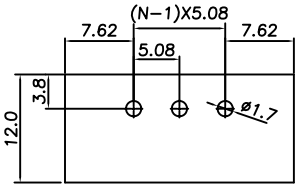
Electrical
Voltage rating: 250VAC
Current rating: 15A
Insulation resistance: 500MΩ at DC 500V
Withstanding Voltage: AC 1500V(1min)
Mechanical:
Using temperature Range: -40°C to +105°C
Soldering temperature:+250°,5seconds Max.

TBH051-PDBF-xx

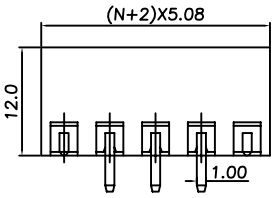
Technical Data:
Material:
Solder Pin: Brass with Tin plated
Flange Screw nut: Brass Nickel plated M2.5
Insulator body(housing): Polyamide(Glass filled)(UL94V-0)

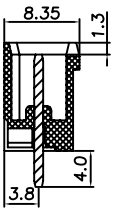


N=Number of contacts



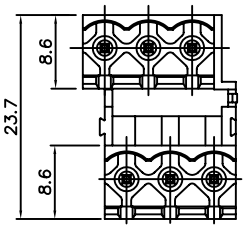
PCB. LAYOUT

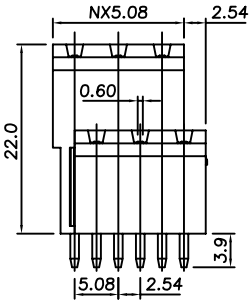




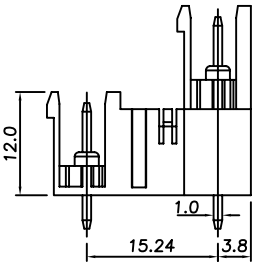
Electrical
Voltage rating: 250VAC
Current rating: 15A
Insulation resistance: 500MΩ at DC 500V
Withstanding Voltage: AC 1500V(1min)
Mechanical:
Using temperature Range: -40°C to +105°C
Soldering temperature:+250°,5seconds Max.

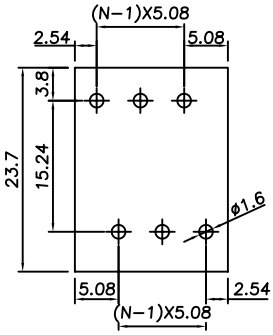
TBH051B1-PDR-xx





N= Number of contacts

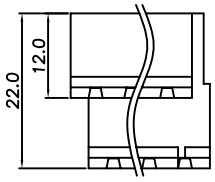


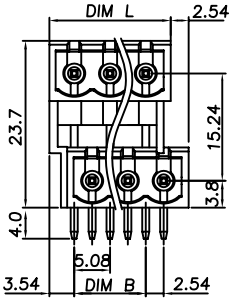


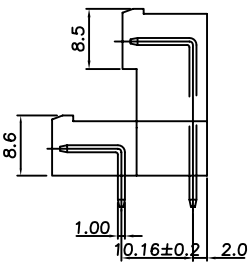
P.C.B LAYOUT

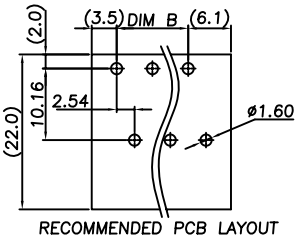
Electrical
Voltage rating: 300VAC
Current rating: 15A
Insulation resistance: 5000MΩ /1000V
Withsanding Voltage: AC1500V(1min)
Mechanical:
Using temperature Range: -30°C to +105°C
Soldering temperature:+250°C/5seconds Max.
Material:
Solder Pin: Brass with Tin plated
Insulator body(housing): Polyamide(Glass filled)] (UL94V-0)

TBH051B1-PRBR-xx









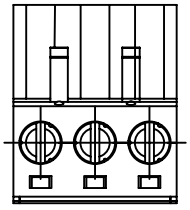
RECOMMENDED PCB LAYOUT

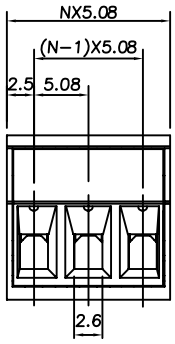
Poles	2*2p	2*3p	2*4p	2*5p	2*6p	2*7p	2*8p	2*9p	2*10p	2*11p	2*12p	2*13p
Dim L	12.16	17.24	22.32	27.40	32.48	37.56	42.64	47.72	52.80	57.88	62.96	68.04
Dim B	5.08	10.16	15.24	20.32	25.40	30.48	35.56	40.64	45.72	50.80	55.88	60.96
TOL	±0.15				±0.20					±0.25		

Poles	2*14p	2*15p	2*16p	2*17p	2*18p	2*19p	2*20p	2*21p	2*22p	2*23p	2*24p	
Dim L	73.12	78.20	83.28	88.36	93.44	98.52	103.60	108.68	113.76	118.84	123.92	
Dim B	66.04	71.12	76.20	81.28	86.36	91.44	96.52	101.60	106.68	111.76	116.84	
TOL	±0.25		±0.30					±0.35				

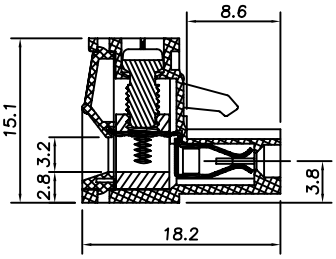
TBH051-SW-xx

Material:
Contact(metal housing): Brass Machined(Option)
Insulator body(housing): Polyamide(Glass filled)(UL94V-0)





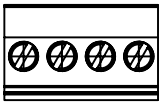
N=Number of contacts



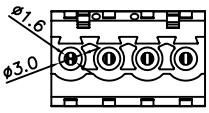
Electrical
Voltage rating: 300VAC
Current rating: 10 Amps/way max
Contact resistance: 20mΩ (max)
Insulation resistance: 5000MΩ /1000V
Withstanding Voltage: 1500VAC(1min) Test time=60sec/1pcs
Wire range: 12-24AWG

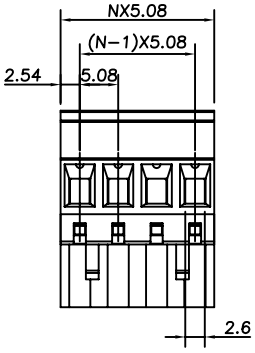
TBH051-SVA-xx

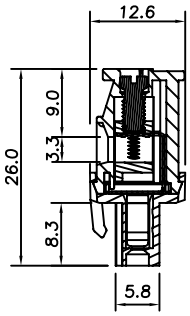
Material:
Contact(metal housing)
: Brass Machined(Option)
Insulator body(housing)
: Polyamide(Glass filled)(UL94V-0)



N=Number of contacts



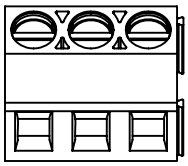


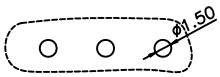


Electrical
Voltage rating: 300VAC
Current rating: 10 Amps/way max
Contact resistance: 20mΩ (max)
Insulation resistance: 5000MΩ /1000V
Withstanding Voltage: 1500VAC(1min) Test time=60sec/1pcs
Wire range: 12-24AWG

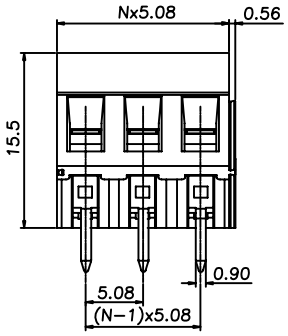
TBH051-A15-xx

Material:
Contact(metal housing)
: Brass Machined(Option)
Insulator body(housing)
: Polyamide(Glass filled)(UL94V-0)

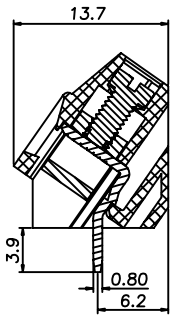




P.C.B. LAYOUT



N=Number of contacts

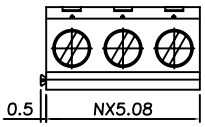


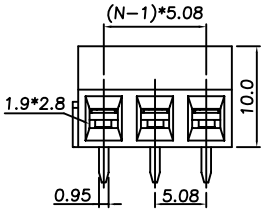
Electrical
Voltage rating: 300VAC
Current rating: 10 Amps/way max
Contact resistance: 20mΩ (max)
Insulation resistance: 5000MΩ /1000V
Withstanding Voltage: 1500VAC(1min) Test time=60sec/1pcs
Wire range: 12-24AWG

TBH051-D10-xx

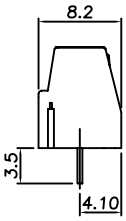
Electrical
Voltage rating: 300VAC
Current rating: 10Amps/way max
Contact resistance: 20mΩ (max)
Insulation resistance: 5000MΩ /1000V
Withsanding Voltage: 1500VAC(1mim)
Test time=60sec/1pcs
Wire range: 14-26AWG

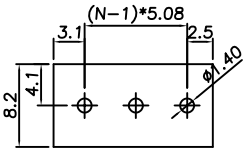
Technical Data:
Material:
Contact(metal housing): Steel Stamping Zinc Die
Casting or Brass Machined (Option)
Solder Pin: Brass with Tin plated
Insulator body(housing): Polyamide(Glass filled)(UL94V-0)





N=Number of contacts



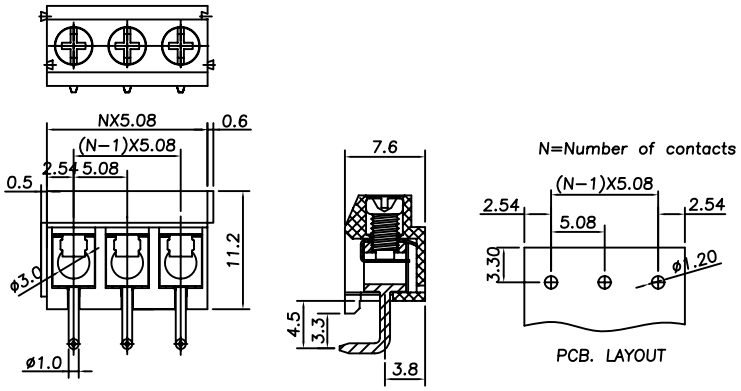


P.C.B. LAYOUT

TBN051-RL-xx

Electrical
Voltage rating: 250VAC
Current rating: 16 Amps/way max
Contact resistance: 20mΩ (max)
Insulation resistance: 5000MΩ/1000V
Withsanding Voltage: 1500VAC(lmim)
Test time=60sec/1pcs
Wire range: 14–22AWG

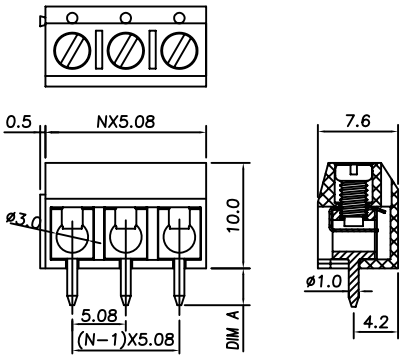
Technical Data:
Material:
Contact(metal housing): Brass (CuZn)
Terminal screw: Steel galvanized and chromatize
or Nickel plated or Tin plted(standard)(optian)
Wire guard: Stainless steel
Surface of solder tail: tin plated
Insulator body(housing): Polyamide(Glass filled)(UL94V–0)



TBN051-D10-xx

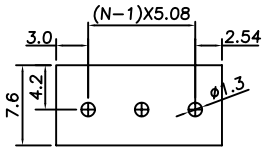
Electrical
Voltage rating: 250VAC
Current rating: 16 Amps/way max
Contact resistance: 20mΩ (max)
Insulation resistance: 5000MΩ/1000V
Withsanding Voltage: 1500VAC(lmim)
Test time=60sec/1pcs
Wire range: 14–22AWG

Technical Data:
Material:
Contact(metal housing): Brass (CuZn)
Terminal screw: Steel galvanized and chromatize
or Nickel plated or Tin plted(standard)(optian)
Wire guard: Stainless steel
Surface of solder tail: tin plated
Insulator body(housing): Polyamide(Glass filled)(UL94V–0)



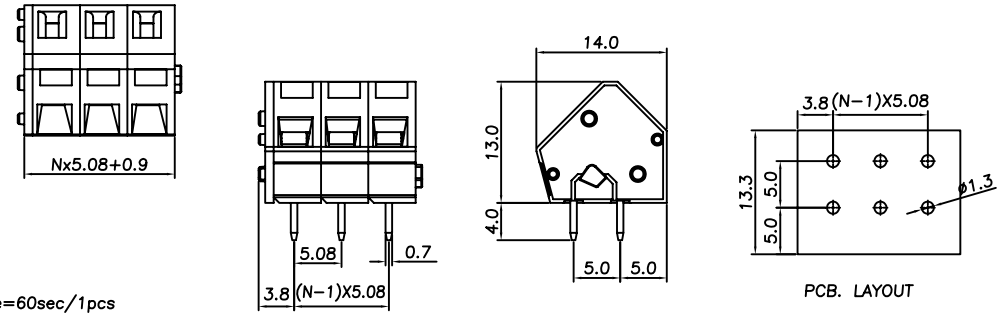
DIM A Length

Code	DIM A
0	4.4mm
1	3.8mm
2	3.5mm
3	2.9mm
4	3.95mm
5	8.5mm



TBY051-A13-xx

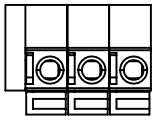
Electrical
Voltage rating: 300VAC
Current rating: 16 Amps/way max
Contact resistance: 20mΩ (max)
Insulation resistance: 5000MΩ/1000V
Withstanding Voltage: 1500VAC(lmim) Test time=60sec/1pcs
Wire range: 14–28AWG
Material:
Contact(metal housing): Brass
Insulator body(housing): Polyamide(Glass filled)(UL94V–0)

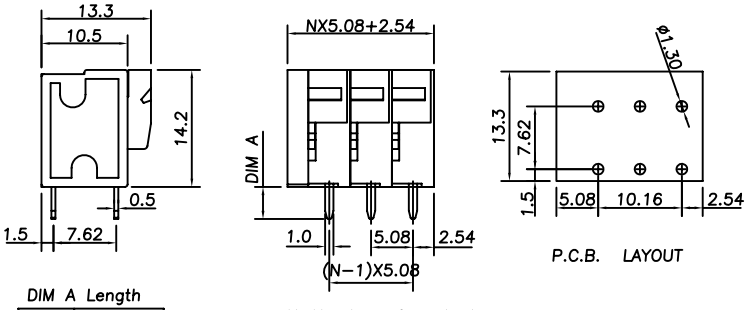


TBX051-D14-xx

Electrical
Voltage rating: 300VAC
Current rating: 10 Amps/way max
Contact resistance: 20mΩ (max)
Insulation resistance: 1000MΩ min.
Wire range: 14–24AWG

Technical Data:
Material:
Contact: Brass
Wire guard: stainless steel
Surface of solder tail: Tin plated
Insulator body(housing): PBT(Glass filled)(UL94V–0)
Insulator Level: Polyamide(Glass filled)(UL94V–0)





DIM A Length

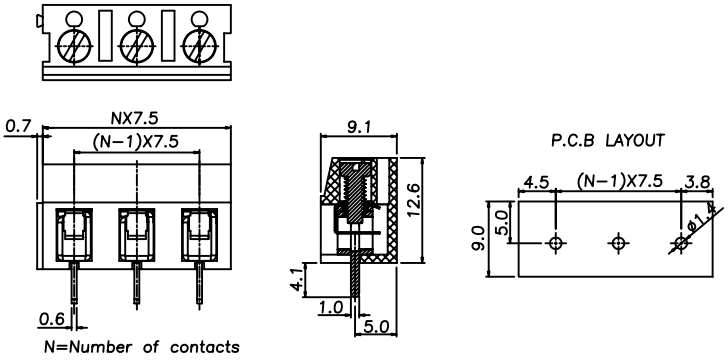
Code	DIM A
0	3.9mm
1	3.5mm

7.50mm Connector

TBN075-D12-xx

Electrical
Voltage rating: 250VAC
Current rating: 16Amps/way max
Contact resistance: 20m (max)
Insulation resistance: 5000MΩ /1000V
Withstanding Voltage: 1500VAC(1min)
Test time=60sec/1pcs
Wire range: 14–22AWG
Operating temperature: –33°C to +120°C

Material:
Contact(metal housing): Brass
Terminal screw: Steel Galvanized and chromatized
Wire guard: Stainless ateel
Insulator body(housing): Polyamide(Glass filled)(UL94V–0)

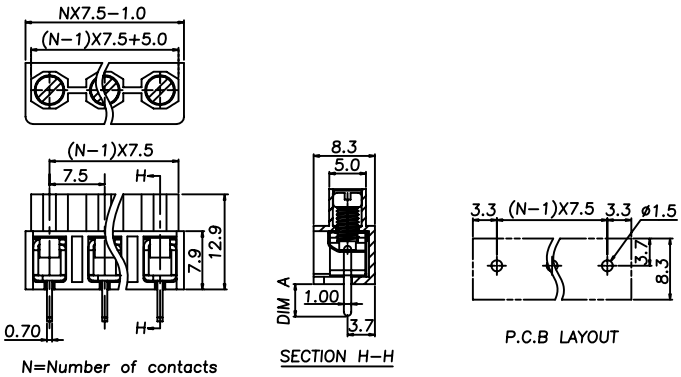


N=Number of contacts

TBN075-D13-xx

Electrical
Voltage rating: 300VAC
Current rating: 10Amps/way max
Wire range: 12–20AWG
Operating temperature: –30°C to +105°C

Material:
Contact(metal housing): Brass,Tin plated
Terminal screw: Steel Zinc plating"–"slot type
Insulator (housing): Thermoplastic(UL94V–0)

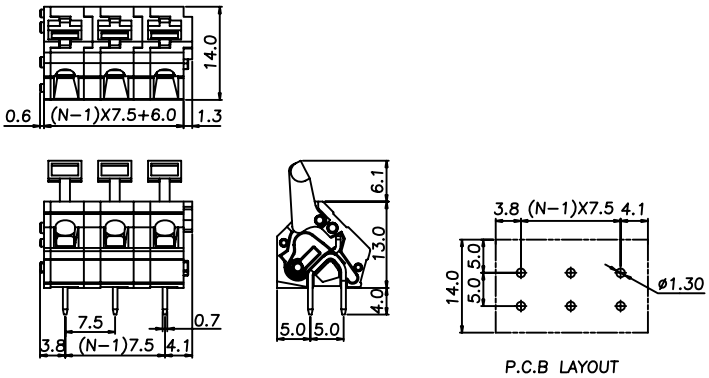


N=Number of contacts

TBX075-A19-xx

Electrical
Voltage rating: 300VAC
Current rating: 15Amps/way max
Wire range: 12–28AWG
Operating temperature: –30°C to +105°C

Material:
Terminal body(Contact pin): Brass
Surface of solder tail: Tin plated
Wire guard: Stainless steel
Insulator (housing): Thermoplastic(UL94V–0)

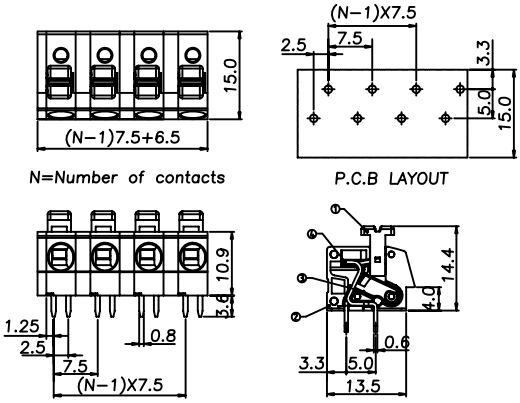


N=Number of contacts

TBX075-R14-xx

Electrical
Voltage rating: 300VAC
Current rating: 10Amps/way max
Wire range: 12–20AWG
Operating temperature: –33°C to +105°C

Material:
Terminal body(Contact pin): Brass
Surface of solder tail: Tin plated
Wire guard: Stainless steel
Insulator (housing): Thermoplastic(UL94V–0)
Insulator (lever): Thermoplastic(UL94V–0)



N=Number of contacts

P.C.B LAYOUT

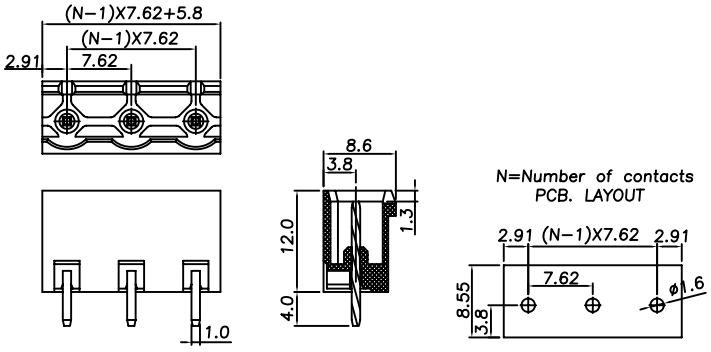
7.60mm Connector

TBH076-PD-xx

Technical Data:
Material:
Solder Pin: Brass with Tin plated
Insulator body(housing): Polyamide
(Glass filled)(UL94V-0)

Electrical
Voltage rating: 300VAC
Current rating: 10A
Insulation resistance: 500MΩ at DC 500V
Withstanding Voltage: AC 1500V(1min)

Mechanical:
Using temperature Range: -40°C to +105°C
Soldering temperature:+250°C ,5seconds Max.

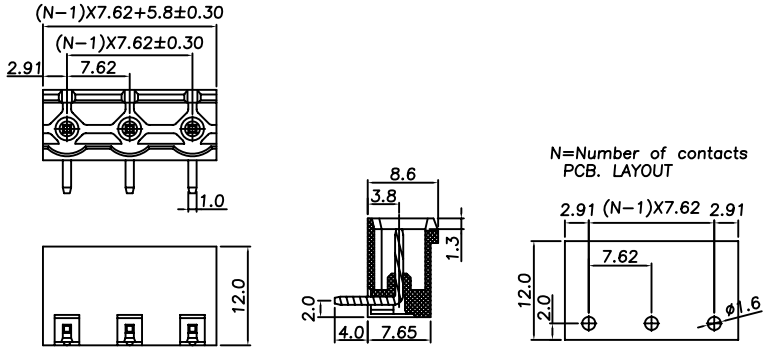


TBH076-PR-xx

Technical Data:
Material:
Solder Pin: Brass with Tin plated
Insulator body(housing): Polyamide
(Glass filled)(UL94V-0)

Electrical
Voltage rating: 300VAC
Current rating: 10A
Insulation resistance: 500MΩ at DC 500V
Withstanding Voltage: AC 1500V(1min)

Mechanical:
Using temperature Range: -40°C to +105°C
Soldering temperature:+250°C ,5seconds Max.

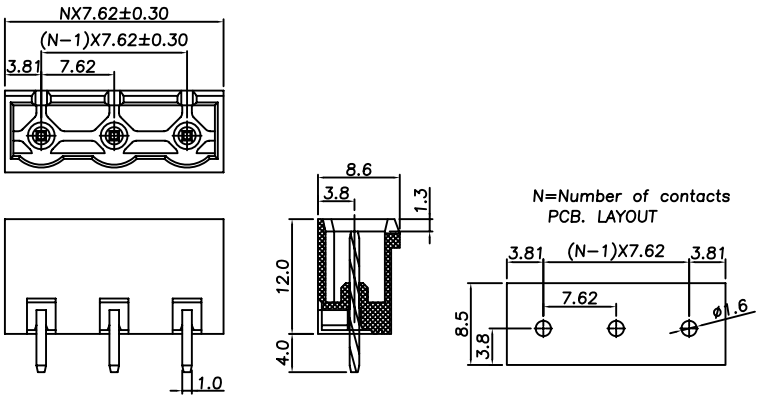


TBH076-PDB-xx

Technical Data:
Material:
Solder Pin: Brass with Tin plated
Insulator body(housing): Polyamide
(Glass filled)(UL94V-0)

Electrical
Voltage rating: 300VAC
Current rating: 10A
Insulation resistance: 500MΩ at DC 500V
Withstanding Voltage: AC 1500V(1min)

Mechanical:
Using temperature Range: -40°C to +105°C
Soldering temperature:+250°C ,5seconds Max.

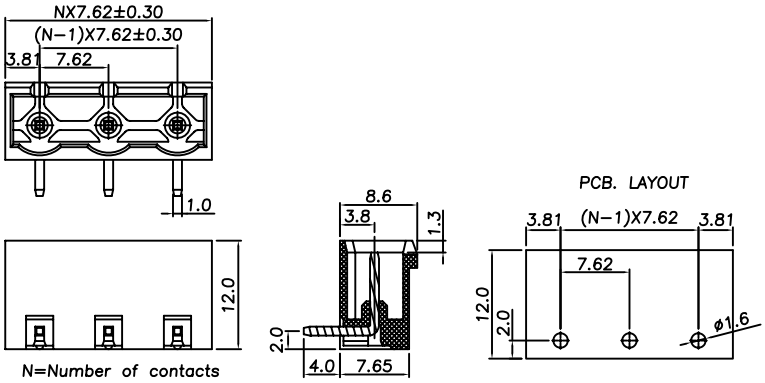


TBH076-PRB-xx

Technical Data:
Material:
Solder Pin: Brass with Tin plated
Insulator body(housing): Polyamide
(Glass filled)(UL94V-0)

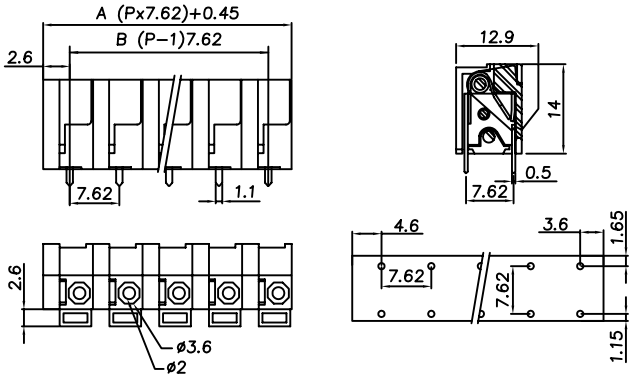
Electrical
Voltage rating: 300VAC
Current rating: 10A
Insulation resistance: 500MΩ at DC 500V
Withstanding Voltage: AC 1500V(1min)

Mechanical:
Using temperature Range: -40°C to +105°C
Soldering temperature:+250°C ,5seconds Max.



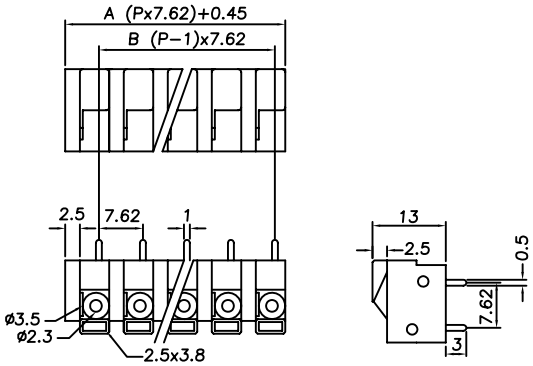
TBX076-D14-xx

SPECIFICATIONS
BODY MATERIAL: THERMOPLASTIC (UL 94V-0).GREEN
TERMINALS : TIN PLATED BRASS
LEVER:THERMOPLASTIC (UL 94V-0).ORANGE
WIRE RANGE: 18-22 STR
RATING : 10AMPERES.300VAC
INSULATION WITHSTANDS VOLTAGE AC 2000V
INSULATION RESISTANCE 500M OR MORE AT DC 500V



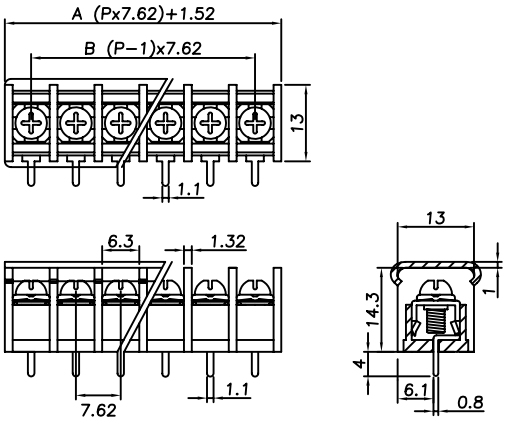
TBX076-R13-xx

SPECIFICATIONS
BODY MATERIAL:THERMOPLASTIC (UL 94V-0).BLACK
TERMINALS:TIN PLATED BRASS
LEVER: THERMOPLATIC (UL 94-V-0),ORANGE
WIRE RANGE AWG:14-18 STR
RATING:10 AMPERES. 75 VAC
INSULATION WITHSTANDS VOLTAGE AC 1500V/MIN
INSULATION RESISTANCE 500M OR MORE AT DC 500V
MINMUM 2POLES WIT END WALL



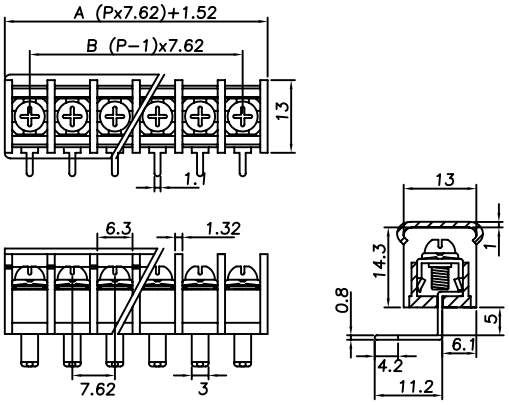
TBB076-DC-xx

SPECIFICATIONS
BARRIER MATERIAL : THERMOPLASTIC (UL 94V-0).BLACK
TERMINALS : TIN PLATED BRASS
SCREW: NICKEL PLATED STEEL
WIRE RANGE:18-22 STR
RATING: 10AMPERES.300VAC
INSULATION WITHSTANDS VOLTAGE AC 2000V
INSULATION RESISTANCE 500M OR MORE AT DC 500V



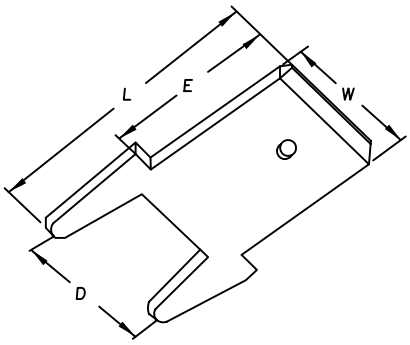
TBB076-RC-xx

SPECIFICATIONS
BARRIER MATERIAL : THERMOPLASTIC (UL 94V-0).BLACK
TERMINALS : TIN PLATED BRASS
SCREW: NICKEL PLATED STEEL
WIRE RANGE:18-22 STR
RATING: 10AMPERES.300VAC
INSULATION WITHSTANDS VOLTAGE AC 2000V
INSULATION RESISTANCE 500M OR MORE AT DC 500V



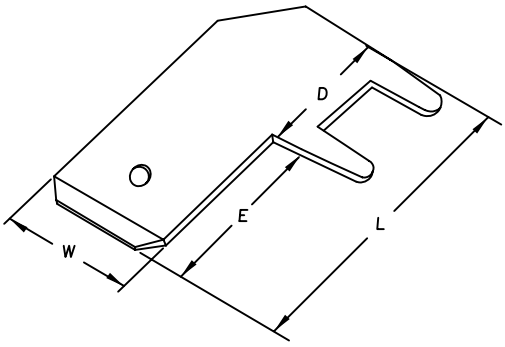
Flat 187 Connector

Q187-MD8-12



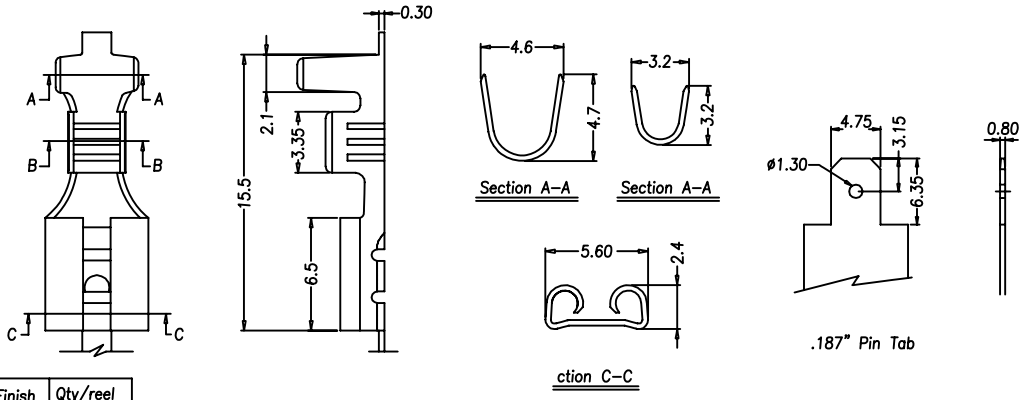
料號 PART NO.	材質 METAL	處理 TREATMENT	尺寸 Dimension(mm)					材料厚度
			D	H	W	L	E	
Q187-MD8-12	-BS-	1/2	5.2		4.8	12.8	7.2	0.8

Q187-MR-8



料號 PART NO.	材質 METAL	處理 TREATMENT	尺寸 Dimension(mm)					材料厚度
			D	H	W	L	E	
Q187-MR8-13	-BS-	1/2	6.3		4.8	13.5	7.3	0.8

Q187-FT8-14



Features:
Mates with 4.75mm*0.8mm thick pin-tab
Quick method of multi-connections

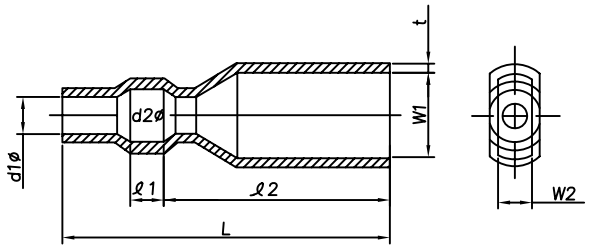
Specifications & Ordering Information:

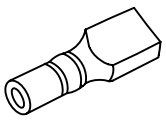
Part No.	Wire Range	Insulation o.d.	Material	Finish	Qty/reel
Q187-FT8-14	AWG#14-18	3.90mm(max)	Brass	Tin Plated	8,000 pcs

Q187-FV-xx

Packing unit: 1,000 pcs per bag

Item No.	d1ø	d2ø	ℓ1	ℓ2±0.5	L±1.5	W1	W2	t±0.2
Q187-FV-20	2.0	2.8	2.8	14.0	22.0	5.8	2.6	1.0
Q187-FV-25	2.5	3.5	2.8	14.0	22.0	5.8	2.6	1.0
Q187-FV-30	3.0	3.8	2.8	14.0	22.0	5.8	2.6	1.0
Q187-FV-34	3.4	4.3	2.8	14.0	22.0	5.8	2.6	1.0
Q187-FV-40	4.0	4.9	2.8	14.0	22.0	5.8	2.6	1.0

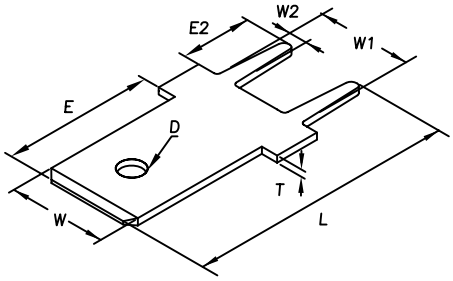


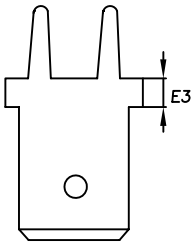


Flat 250 Connector

Q250-MD8-14

SPECIFICATION
(MATERIAL): BRASS
(STANDARD PACKING) :1000PCS



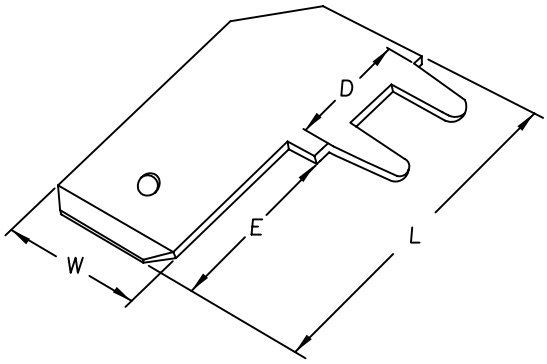


E3:2.20±0.20

T: 0.80±0.05	L: 14.00±0.30	W:6.40±0.30	W1:6.40±0.20
D: 2.0±0.30	E: 8.20±0.40	E2:3.90±0.20	W2:1.30±0.15

Q250-MR8-16

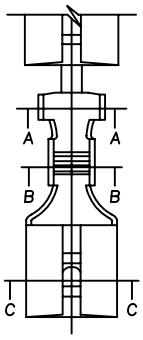
SPECIFICATION
(MATERIAL): BRASS
(STANDARD PACKING) :1000PCS

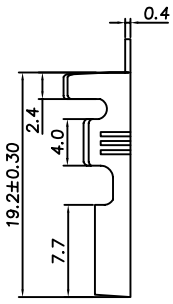


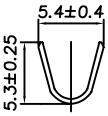
料號 PART NO.	材質 METAL	處理 TREATMENT	尺寸 Dimension(mm)					材料厚度
			D	H	W	L	E	
Q250-MR8-16	-BS-	1/2	6.3		6.35	16	7.7	0.8

Q250-FT8-14

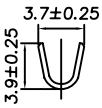
Features:
Mates with 6.35MM 0.8mm thick pin-tab
Quick method of multi-connections



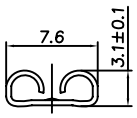




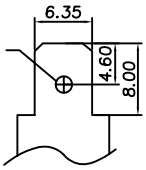
Section: A-A

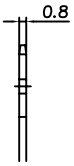


Section: B-B



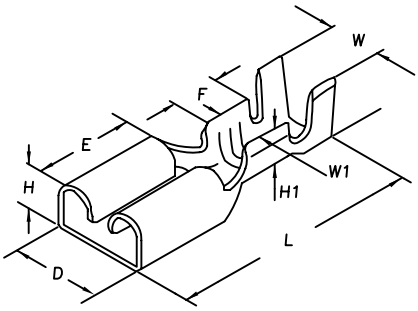
Section: C-C

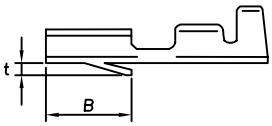




Part No	Wire Range	Insulation O.D.	Finish	Qty/reel
Q250-FT8-14	AWG#14-18	3.90mm (max)	Tin-Plated	5,000 PCS

Q250-FBL-18

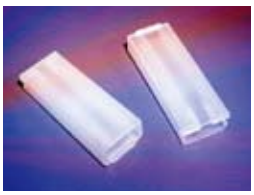




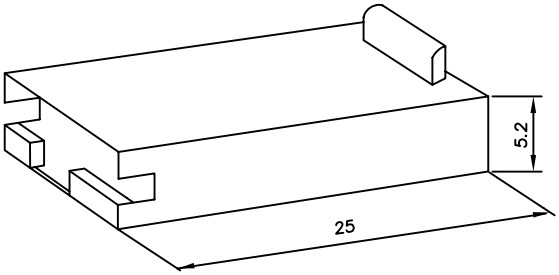
T	t	L	D	E	F	H	W	W1	H1	B	
0.3	1.1	19.2	7.5	7.5	4.0	2.85	4.4	2.5	2.8	7.2	

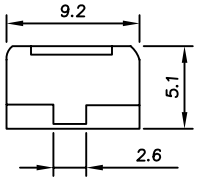
PART NO.	MATERIAL /FINISH	WIRE GAUGE AWG	THICKNESS 材料厚度	Q'TY 數量
Q250-FBL-18	BRASS SH	18-22	0.35mm	5000

Q250-FN-01



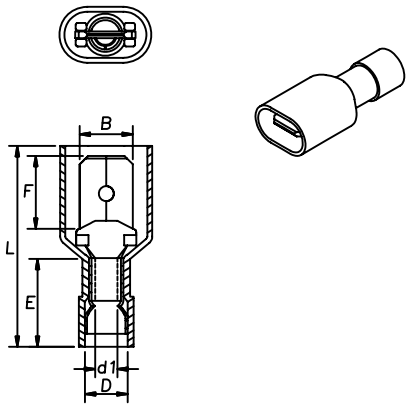
MATERIAL: NYLON-66 UL94V-2
PACKING: BAG/1000PCS





Q250-MT8NFC-xx

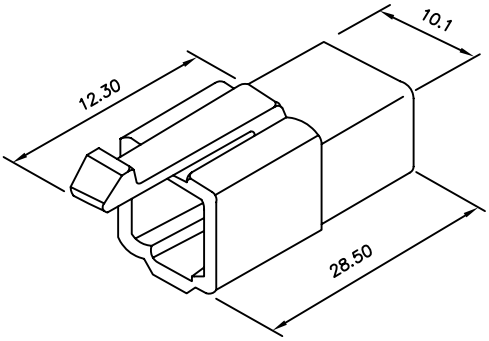
NOTE:
MAXIMUM ELECTRICAL RATING: 105°C 300 VOLTS
Q250-MT8NFC-16
1.WIRE RANGE:AWG 22-16/0.5-1.5mm^2 :10 AMPERE MAX.
2.INSULATED COLOR: RED
Q250-MT8NFC-14
1.WIRE RANGE:AWG 16-14/1.5-2.5mm^2 :15 AMPERE MAX.
2.INSULATED COLOR: BLUE
Q250-MT8NFC-10
1.WIRE RANGE:AWG 12-10/4-6mm^2 :24 AMPERE MAX.
2.INSULATED COLOR: YELLOW



ITEM NO.	NEMA TAB	B ±0.20	F ±0.30	L ±0.10	E ±0.60	d1 ±0.20	D ±0.30
Q250-MT8NFC-16	0.8X6.4	6.4	7.9	23.5	10.5	1.7	4.2
Q250-MT8NFC-14	0.8X6.4			23.5		2.3	4.9
Q250-MT8NFC-10	0.8X6.4			27.0	13.0	3.4	6.5

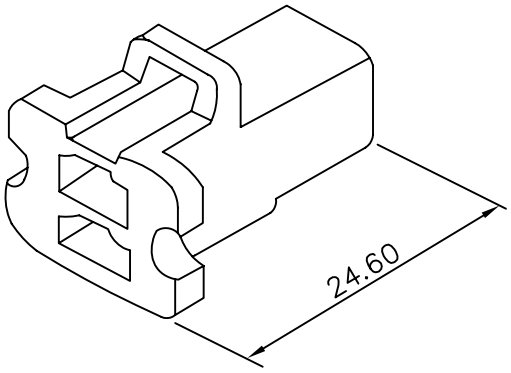
Q250-MHL-02

MATERIAL: NYLON 66
COLOR: NATURE
BLACK
Q'TY: IN BAG 200PCS



Q250-FHL-02

MATERIAL: NYLON 66
COLOR: NATURE
BLACK
Q'TY: IN BAG 200PCS



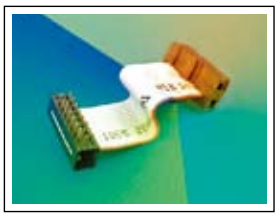
Custom made assemblies

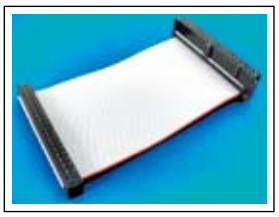
客 製 品 開 發 設 計 製 造

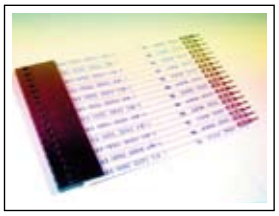
Flat Cable Assemblies

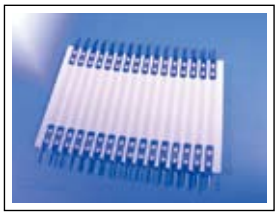

HAF2X2-4040-FN10C


MF2X2-1010-F3N


F2IP01-1414-A2N5


F3IP01-4040-A8C


PVFX2-1818-E6C5


PVFX2-1616-M3C


DF9X2-3131-F7C6


PVFX2-0408-FN18C


JC-16-127


SATAX2-0707-F18C


RJX2-0606BK-M50C


HF-28R5HF-xx

Round Cable Assemblies


HDMIX2-1919-M1M5


HDX2-1515BG-F60C


RJX2-0808RV-M30C


DBFH-2506-E3F


MBUB-5B4A-M1M5

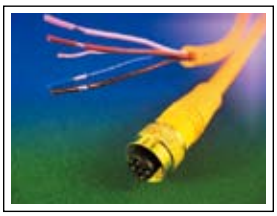

DBUB-094A-A2M


UBX2-4A4B2VFC-M2M


DCX1-5521-F30C

RF Cable Assemblies


MDX2-0606-M3F


M12X1-0400-F6F


DBRJACFP-258802-F6F


MMCXX1-1R1X178-M7C

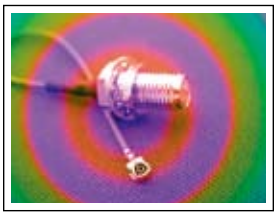

FMEMMCX-1S1R174-M16C


SMAX1-1S1X100-F20C


MMCXSMA-1R1S174-E7C


MCXMHF-1S1R132-A4C


MCXSMA-1R1S316-M14C


MHFSMA-1R1S113-E10C


MHFMUHF-1R1S113-E20C

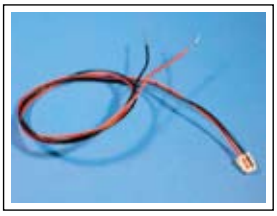

MCXX1-1S1X174CM-M1M5

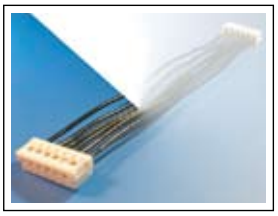
Wire Hamesses


XHX1-0300-F6C


PVX2-0202-FN60C


MIFX1-B110022-F2M


SURX1-0200-F6N

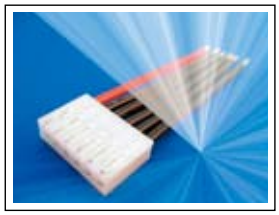

CTX2-0606-F9C5


MKX1-0700-F54C


FNSH-0303-E9C


MJ623K-0604-100


MCGX2-040422-F8N


KKX1-0600-F7C

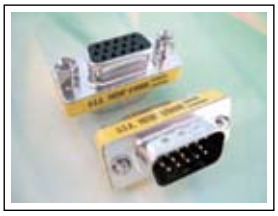

FIXPHMS-301403-E85C


FIXX2-3030LL-M6C4

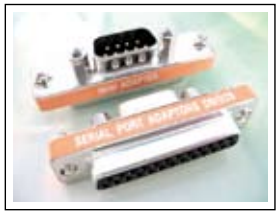
Adaptor


DBX2-ES-0909


DBX2-ES-1515


HDX2-ES-1515


DBHD-ES-1515


DBX2-ES-0925


DBRJ-EA1-0988


DBRJ-FA1-2588

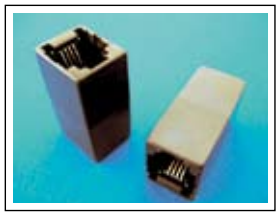

DVIHD-EMxx-1715


MBUB-EM2V-5B4A


UBX2-MMBG-4A4A


UBX2-FMBG-4A4A


UBX2-EMBG-4A4B


RJX2-FS-0604


RJX2-ET-0808


PNRC-EM-0202


PNRC-ET-0302

Company Profile

Company overview

Company Profile

Founded in 1983, Morethanall designs and manufactures various types of connectors to meet 5C's market trend. Applied to computers, consumer electronics, communications, automobile and channel distributions, our products have gained a fine reputation and selling successfully over the world.

Wide product range

We offering comprehensive and diversified product range:

- Board to Board, pin headers, female headers, jumper, DIN 41612, LCM
- Board to Wire, wafers, housings, terminals, wire to wire
- Ribbon cable connectors, serial ATA connectors, IDC sockets, IDC plugs, IDC headers, box headers, latch headers, ejection headers, card edge connectors
- FPC/FFC sockets and cables, ZIF or non-ZIF
- IC card/memory card connectors, PCMCIA, Compact Flash, SD card, Memory Stick, XD card, smart card, SIM card, game cartridge, edge slots, AGP slots, PCI slots
- Socket type connectors, battery holders, DIMM sockets, SIMM sockets, SOJ sockets, PLCC sockets, IC sockets
- Rectangular I/O connectors, USB, mini USB, D-sub, high density, half pitch, SCA, SCSI, 1394, 1394a, 1394b, V.35, cellular phone connectors
- Circular I/O connectors, jacks and plugs, DC, phono, earphone, RCA, circular DIN, mini DIN, coaxial connectors
- Telecom I/O connectors, RJ11, RJ12, RJ45, modular jacks, modular plugs and telephone splices
- Terminals and Terminal blocks, barrier type, Euro PCB type, plug-in, IDC-clamp, screw-clamp, cage-clamp, spring-clamp, screwless, terminals and housings for automobile business and any custom-made connectors and cable assemblies are welcome.

Both our Taiwan and mainland China facilities can meet your exact specifications.
More newly connectors are being announced constantly. For more product details, inquire now.

Factory Tour

Visit any of our factories:
- Welcome to Our Taiwan Factory
- Welcome to the Shenzhen Factory

Welcome to Our Taiwan Factory

- **Profile**

  Total area of :
  3000 square meters
  (32292 square feet)
  Located in:
  Keelung City, Taiwan
  Taiwan Keelung City Taipei
  Built in 1990


Automatic production department


Assembly department

- **Staff Details**

  Production Staff: 30 to 39
  QC Staff: 10 to 19
  R&D Staff: 5 to 9

- **Site Advantages/Description**

  We are within reasonable travel time to all major routes of transport. It takes under 15 minutes to reach the sea port, railway station as well as the highway. We can easily transport cargo to the CKS International airport in 1.5 hours.

- **Materials/Components**

  Half of our raw parts and components are imported from Japan, while the rest are sourced from local suppliers.


Head office in Taipei, Taiwan

R&D

- **R&D Staff**
  20 to 29

- **Machinery/Equipment for R&D**
  We import 50% of the latest R&D equipment from Germany and Japan. Together with 50% local machinery, these high-tech instruments allow our department to develop 20 new series each year.


Testing machines


Inspection equipment

- **Locations**
  - Keelung city, Taiwan
  - Shenzhen, China
- **Profile**
  - Forward us your specific inquries to receive a prompt response.

Quality Control

- **R&D Staff**
  20 to 29

- **Machinery/Equipment for R&D**
  We import 50% of the latest R&D equipment from Germany and Japan. Together with 50% local machinery, these high-tech instruments allow our department to develop 20 new series each year.


Projecter


Inspection machines

- **Materials/Components**
  - Germany
  - Japan
  - The Taiwan region

- **Procedures/testing Details**
  Our R&D team checks for product flaws by using insertion/withdraw machines, high pot testers, contact resistance instruments, projectors, gauges and calibrators. We strictly adhere to UL, CSA, VDE, CNC and CCC standards.

R&D


Our production crew


Our production crew


Our production crew

- **OEM Capability**
  Our complete range of products manufactured according to ISO 9001:2000 guidelines is at your disposal. OEM services encompass buyer´s logo or label, designs services plus a whole after sales support package.

- Terminals: 50 million pieces per month
- Housing: 5 million pieces per month
- Wafers: 5 million pieces per month

- **Staff Details**

Production Staff : 250 to 299
QC Staff : 40 to 49
R&D Staff : 20 to 29

- **Years of OEM Experience**
  20

- **Design Services Offered**
  Yes

- **Buyer Label Offered**
  Yes

- **Materials/Components**
- Japan: 50%
- Local: 50%
  Products are UL, CSA, VDE, CNC and CCC-approved.

- **Major Markets Served**
  Worldwide

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料 號 索 引

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