

Part Number: LED-D-04

Hyper Red
Blue
Green

Features

- UNIFORM LIGHT OUTPUT.
- LOW POWER CONSUMPTION.
- I.C.COMPATIBLE.
- LONG LIFE-SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

Description

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

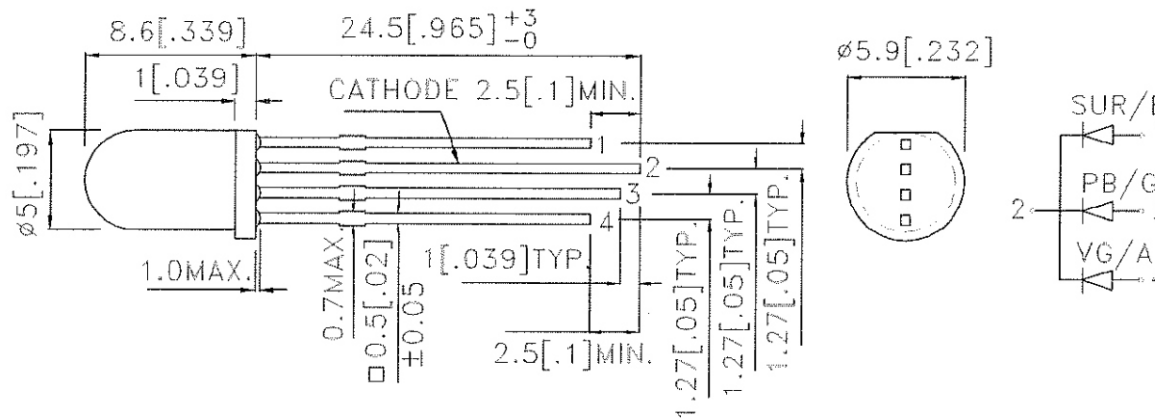
The Green source color devices are made with InGaN on G-SiC Light Emitting Diode.

Static electricity and surge damage the LEDs.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

Package Dimensions



LED-D-04-LF
LEADFREE

RoHS Compliant

MORETHANALL
CONNECTORS
ASSEMBLIES

PART NO. LED-D-04

DWG NO. LED-D-04

CHECKED BY CY

TOLERANCES ARE

DESCRIP TION:

FILE NO.

DRAWING BY

.X ± 0.2

.XX ± 0.1

.XXX ±

AWG

AREA

REVISIONS

HK

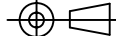
DATE

煜倫股份有限公司

UNIT / mm

SCALE 1:1

PROJECTION



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
LED-D-04	Hyper Red (InGaAlP)	WATER CLEAR	650	1300	50°
	Blue (InGaN)		280	800	
	Green (InGaN)		480	1200	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Hyper Red Blue Green	640 468 520		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Hyper Red Blue Green	630 470 525		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Hyper Red Blue Green	25 21 35		nm	I _F =20mA
C	Capacitance	Hyper Red Blue Green	45 100 100		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Hyper Red Blue Green	1.9 3.2 3.2	2.5 4 4	V	I _F =20mA
I _R	Reverse Current	Hyper Red Blue Green		10 10 10	uA	V _R =5V

Notes:

1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Blue	Green	Units
Power dissipation	75	120	120	mW
DC Forward Current	30	30	30	mA
Peak Forward Current [1]	200	100	100	mA
Reverse Voltage	5			V
Operating/Storage Temperature	-40°C To +85°C			
Lead Solder Temperature [2]	260°C For 3 Seconds			
Lead Solder Temperature [3]	260°C For 5 Seconds			

Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.