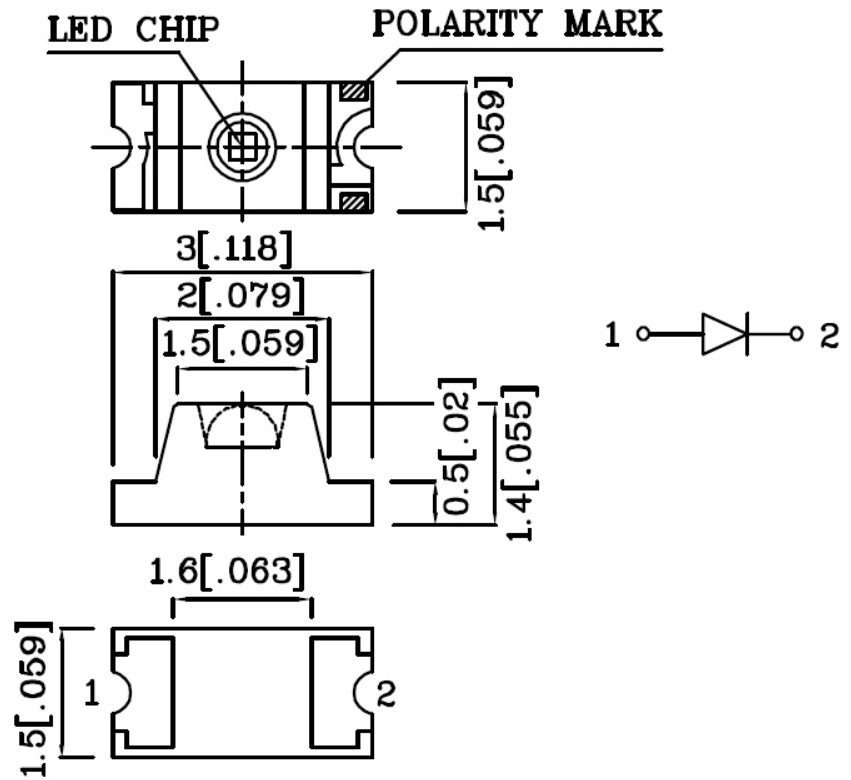


### Features

- 3.0mmx1.5mm SMT LED, 1.4mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

LED-VRD-14-LF  
LEADFREE

**RoHS Compliant**



Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2θ 1/2
				min.	typ.		
<b>LED-VRD-14</b>	Red	InGaAlP	Water Clear	110	278	640	70°

**MORETHANALL**  
CONNECTORS  
ASSEMBLIES

PART NO. **LED-VRD-14**

DWG NO. **LED-VRD-14**

FILE NO.

UNIT / mm

SCALE 1:1

CHECKED BY CY

DRAWING BY

PROJECTION



TOLERANCES ARE

.X ± 0.2  
.XX ±  
.XXX ±  
AWG

DESCRIPTION:

AREA

REVISIONS

HK

DATE



煜倫股份有限公司

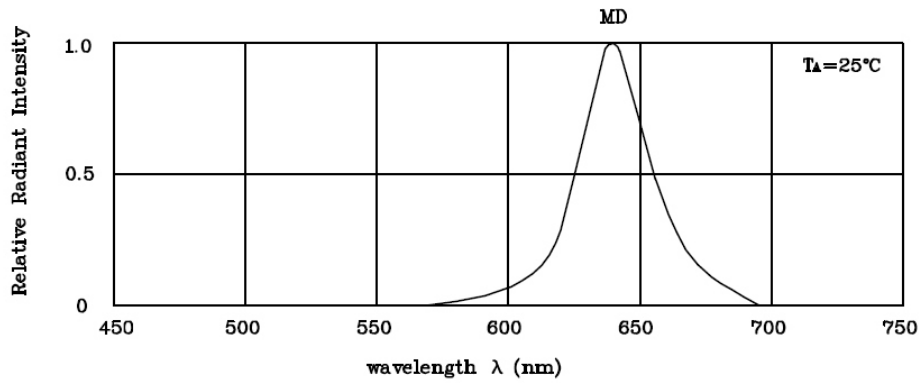
Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ± 0.2(0.008") unless otherwise noted.

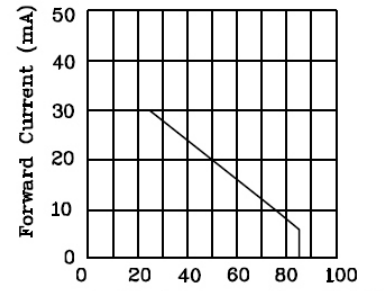
Absolute maximum ratings (TA=25°C)		MD (InGaAlP)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	185	mA
Power Dissipation	PT	170	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	

Operating Characteristics (TA=25°C)		MD (InGaAlP)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	1.9	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	V
Reverse Current (VR=5V)	IR	10	uA
Wavelength of Peak Emission (IF=20mA)	λ P	640	nm
Wavelength of Dominant Emission (IF=20mA)	λ D	628	nm
Spectral Line Full Width At Half-Maximum (IF=20mA)	Δλ	27	nm
Capacitance (VF=0V, f=1MHz)	C	45	pF

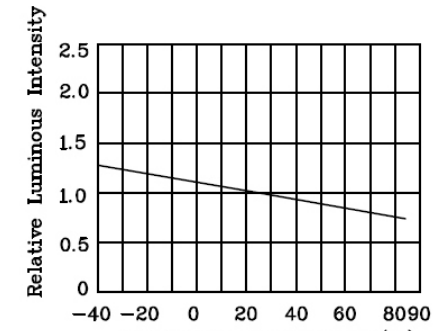
	PART NO. <b>LED-Vxx-14</b>		CHECKED BY CY	TOLERANCES ARE .X ± 0.2 .XX ± .XXX ± AWG	DESCRIP TION:	AREA	REVISIONS	HK	DATE
	DWG NO. <b>LED-Vxx-14</b>								
<b>煜倫股份有限公司</b>	FILE NO.		PROJECTION 						
	UNIT / mm	SCALE 1:1							



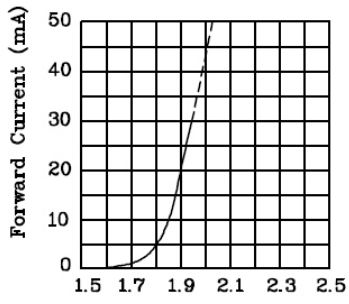
RELATIVE INTENSITY Vs. WAVELENGTH



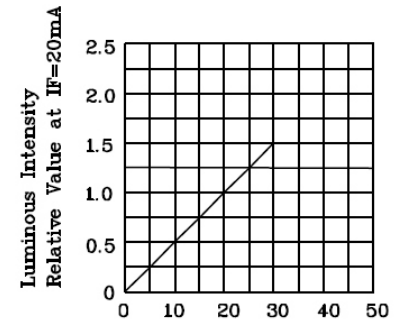
FORWARD CURRENT DERATING CURVE



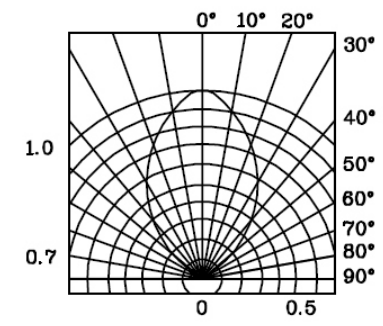
LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION

**MORETHANALL**  
CONNECTORS  
ASSEMBLIES

PART NO. **LED-Vxx-14**

DWG NO. **LED-Vxx-14**

CHECKED BY CY

TOLERANCES ARE

DESCRIP TION: 3.0mmx1.5mm SMD CHIP LED LAMP

FILE NO.

DRAWING BY

.X ± 0.2  
.XX ±  
.XXX ±  
AWG

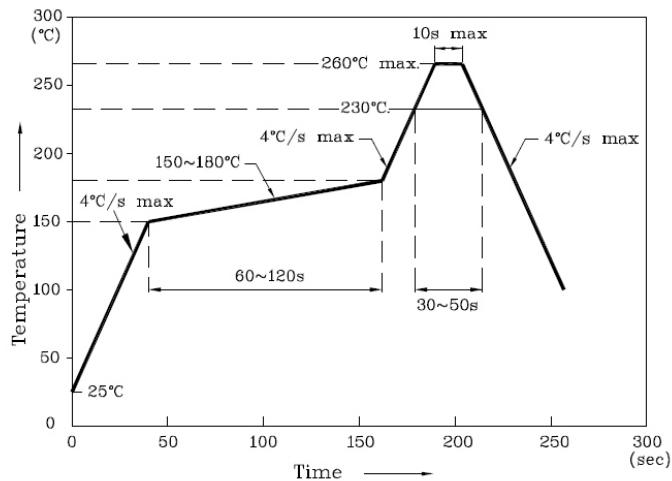
AREA	REVISIONS	HK	DATE
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煜倫股份有限公司

UNIT / mm SCALE 1:1

PROJECTION

Reflow Soldering Profile For Lead-free SMT Process.



Notes:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

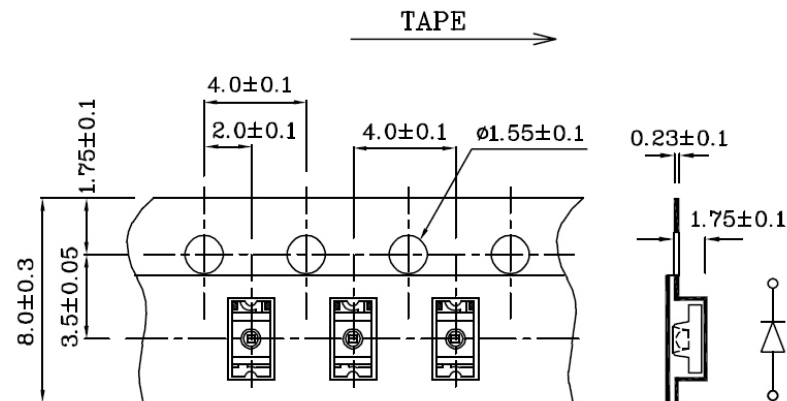
Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity or wavelength), the typical accuracy of the sorting process is as follows:

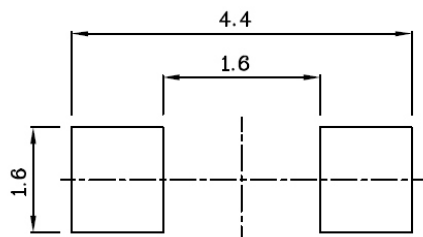
1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

❖ Tape Specification (Units : mm)



❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



**M**ORETHANALL  
CONNECTORS  
ASSEMBLIES

PART NO. **LED-Vxx-14**

DWG NO. **LED-Vxx-14**

FILE NO.

UNIT / mm

SCALE 1:1

CHECKED BY CY

DRAWING BY

PROJECTION

TOLERANCES ARE

.X ± 0.2  
.XX ±  
.XXX ±  
AWG

DESCRIPTION:

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