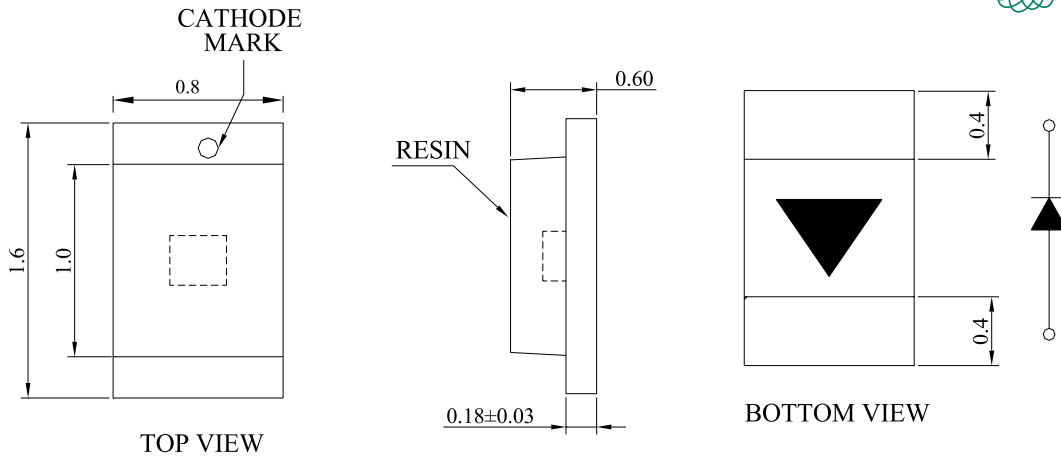


# SMD Chip LED



## Package Dimensions:



All dimensions are in mm  
Tolerance:  $\pm 0.1$ mm

## Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Power Dissipation	$P_D$	66	$^\circ\text{C}$
Reverse Voltage	$V_R$	4	V
D.C. Forward Current	$I_f$	30	mA
Pulsed Forward Current (1 / 10 Duty Cycle, 0.1ms Pulse Width)	$I_f$ (Peak)	80	mA
Operating Temperature Range	$T_{opr.}$	-40 to +80	$^\circ\text{C}$
Storage Temperature Range	$T_{stg.}$	-40 to +85	$^\circ\text{C}$
Soldering Temperature	$T_{sld.}$	Reflow Soldering: $260^\circ\text{C}$ for 10sec.	

## Electrical & Optical Characteristics: Hyper Red

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	$I_v$	$I_f = 20\text{mA}$	-	15	-	mcd
Forward Voltage	$V_f$	$I_f = 20\text{mA}$	-	1.8	2.2	V
Peak Wavelength	$\lambda_p$	$I_f = 20\text{mA}$	-	660	-	nm
Dominant Wavelength	$\lambda_d$	$I_f = 20\text{mA}$	-	643	-	nm
Reverse Current	$I_r$	$V_r = 5\text{V}$	-	-	100	$\mu\text{A}$
Viewing Angle	$2\theta_{1/2}$	$I_f = 20\text{mA}$	-	140	-	deg
Spectrum Line Halfwidth	$\Delta\lambda$	$I_f = 20\text{mA}$	-	20	-	nm

Note: 1. The data is tested by an IS tester  
2. Customer's special requirements are also welcome.

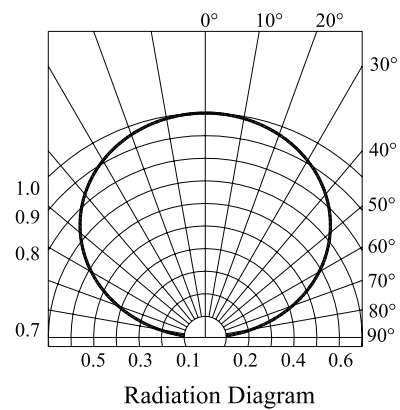
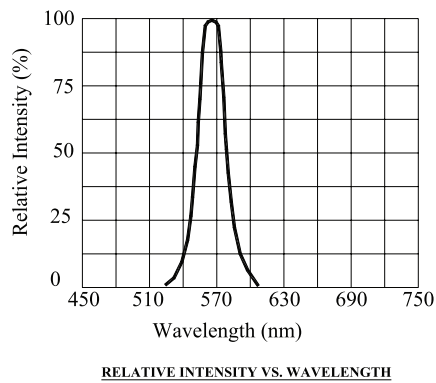
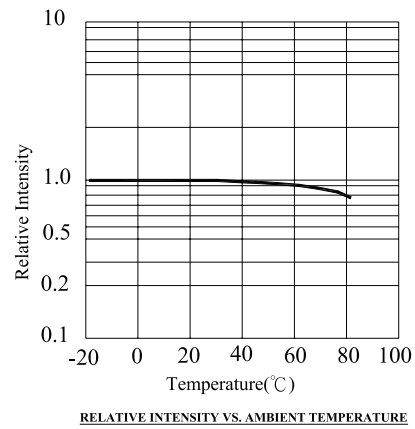
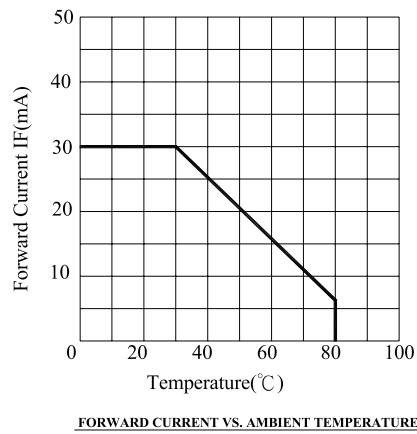
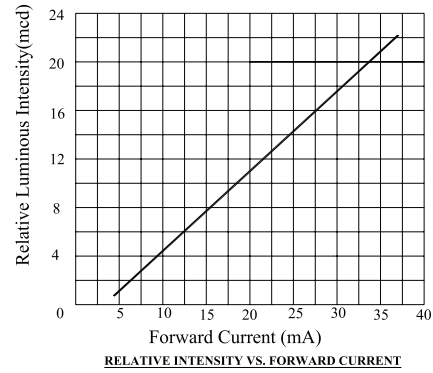
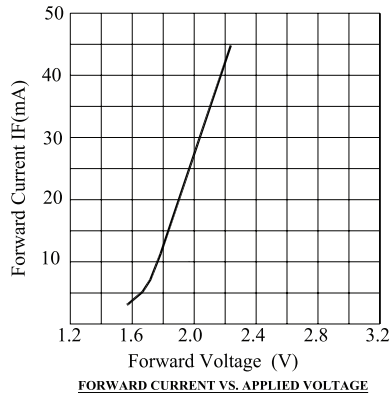


# SMD Chip LED



## Typical Electrical & Optical Characteristics Curves:

(25°C Ambient temperature unless otherwise noted)



## Recommended Storage Environment:

- Temperature: 5°C to 30°C (41°F to 86°F)
- Humidity: 60% RH Max.
- Use within 7 days after opening of sealed vapour/ESD barrier bags

If moisture absorbent material (silica gel) has faded away or LEDs have exceeded the storage time, baking treatment should be performed using the following conditions:

- Baking Treatment : 60 ± 5°C for 24 hours
- Fold the opened bag firmly and keep in dry environment

## Reflow Soldering

Recommended use of upper and lower heater type reflow furnace.

- 260°C max for up to 10 seconds, one time only
- Pre-heat is 150°C max for up to 2 minutes max
- In case of screen-printing, keep metal mask thickness between 0.2mm and 0.3mm

## Cleaning

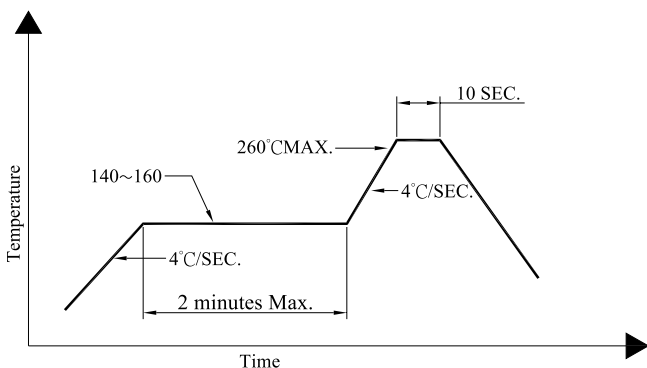
Surface condition of this device may change when organic solvents such as trichloroethylene or acetone were applied.

- Avoid using organic solvent
- Recommend ultrasonic method 300W max.

## Packaging

- EIA-481A standard package
- In 8mm tape on 4,000pcs diameter reels sealed in vapour/ESD barrier bags

## Reflow Temp / Time:



## Part Number Table

LED Chip		Lens Colour	Part Number
Material	Emitting Colour		
AlGaAs / GaAs	Red	White diffused	703-0112

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