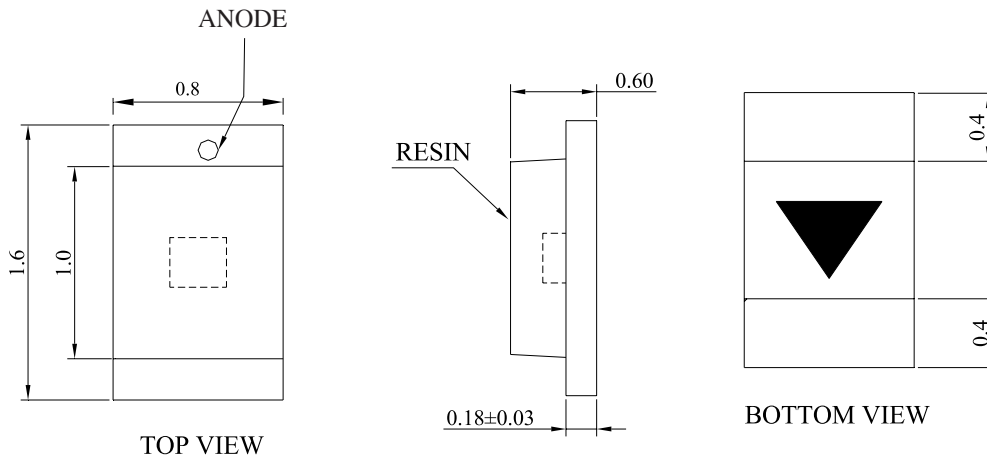


SMD Chip LED

Package Dimensions:



All dimensions are in mm
Tolerance: $\pm 0.1\text{mm}$

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

Parameter	Symbol	Rating	Unit
Power Dissipation	P_D	66	mW
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	$T_{opr.}$	-30 to +80	$^\circ\text{C}$
Storage Temperature Range	$T_{stg.}$	-40 to +85	$^\circ\text{C}$
Soldering Temperature	$T_{sol.}$	Reflow Soldering: 260°C for 10sec.	

Electrical & Optical Characteristics: Hyper Red

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	I_v	$I_f = 20\text{mA}$	11	24	-	mcd
Forward Voltage	V_f	$I_f = 20\text{mA}$	-	1.8	2.2	V
Peak Wavelength	λ_p	$I_f = 20\text{mA}$	-	660	-	nm
Dominant Wavelength	λ_d	$I_f = 20\text{mA}$	-	643	-	nm
Reverse Current	I_r	$V_r = 4\text{V}$	-	-	100	μA
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

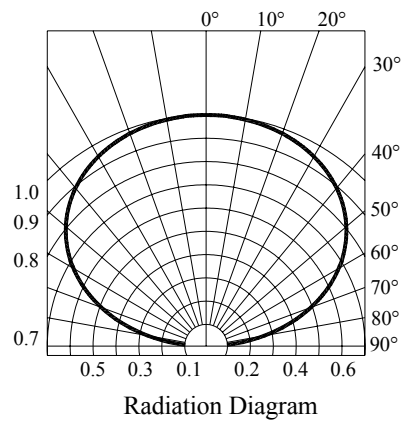
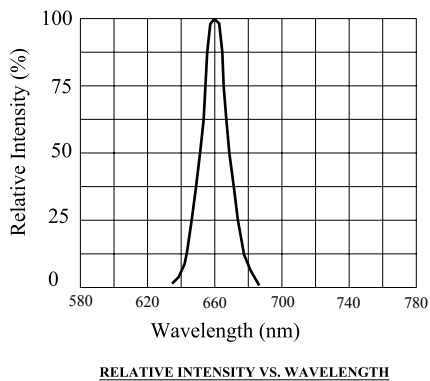
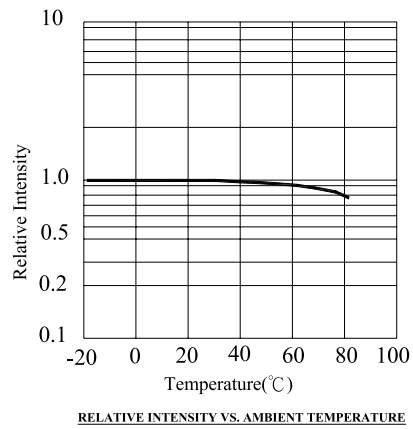
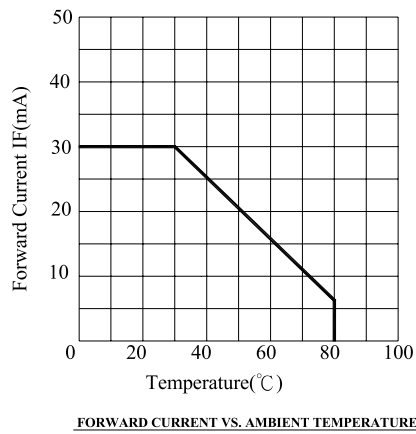
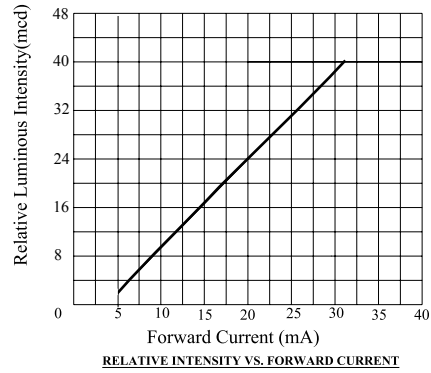
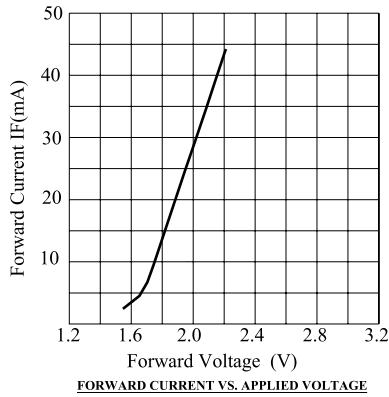
Note: 1. The data is tested by an IS tester
2. Customer's special requirements are also welcome.

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

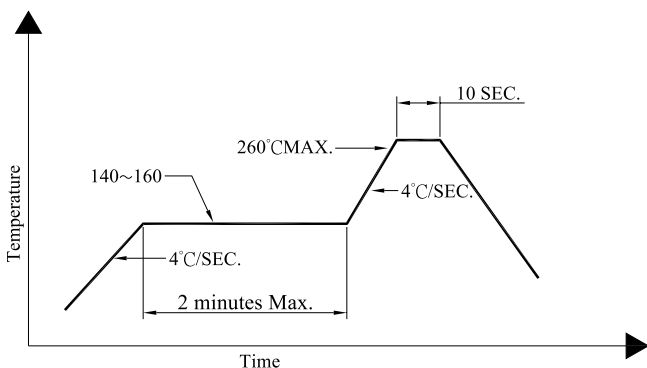
Surface condition of this device may change when organic solvents such as trichloroethylene or acetone were applied.

- 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

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2014.