SMD Chip LED



RoHS Compliant

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit	
Power Dissipation	PD	66	°C	
Reverse Voltage	Vr	4	V	
D.C. Forward Current	lf	30	mA	
Pulsed Forward Current (1 / 10 Duty Cycle, 0.1ms Pulse Width)	If (Peak)	80	mA	
Operating Temperature Range	Topr.	-40 to +80	°C	
Storage Temperature Range	Tstg.	-40 to +85	°C	
Soldering Temperature	Tsld.	Reflow Soldering: 260°C for 10sec.		

Electrical & Optical Characteristics: Hyper Red

Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
Luminous Intensity	lv	lf = 20mA	-	15	-	mcd
Forward Voltage	Vf	lf = 20mA	-	1.8	2.2	V
Peak Wavelength	λр	lf = 20mA	-	660	-	nm
Dominent Wavelength	λd	lf = 20mA	-	643	-	nm
Reverse Current	lr	Vr = 5V	-	-	100	μA
Viewing Angle	20 1⁄2	lf = 20mA	-	140	-	deg
Spectrum Line Halfwidth	Δλ	lf = 20mA	-	20	-	nm

Note: 1. The data is tested by an IS tester

2. Customer's special requirements are also welcome.

Package Dimensions:



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35 40

100

30°

40°

50°

60°

70°

80°

90°

0.6

80

 20°

Typical Electrical & Optical Characteristics Curves:

(25°C Ambient temperature unless otherwise noted)



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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			Part Number	
Material	Emitting Colour	Lens Colour	Fait Nulliber	
AlGaAs / GaAs	Red	White diffused	703-0112	

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