# 0603 SMD Chip LED

# multicomp PRO

# RoHS Compliant

## **Specifications**

Dice material	: InGaN/Sapphire
Emmiting Colour	: Blue
Lens colour	: Water clear
Dominant Wavelength	: 465nm
Viewing angle	: 130°
Luminous intensity (IV)	: 100mcd

### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Power Dissipation	PD	120	mW
D.C Forward current	lf	30	mA
Reverse Voltage	Vr	5	V
Operating Temperature	Тор	-30 to +80	°C
Storage Temperature	Tstg.	-40 to +85	°C
Peak Current (1/10Duty Cycle,0.1ms Pulse Width.)	lf (peak)	80	mA
Soldering Temperature	Tsol	Reflow Soldering: 260°C for 10 sec.	
Electric Static Discharge	ESD	300	V

### **Electrical and Optical Characteristics**

Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
Luminous Intensity	lv	lf=20mA	51.6	100		mcd
Forward Voltage	Vf	lf=20mA		3.2	4	V
Peak Wavelength	λр					
Dominant Wavelength	λd	lf=20mA		465		nm
Reverse Current	lr	Vr=5V			50	μA
Viewing Angle	201/2	lf=20mA		130		deg
Spectrum Line Halfwidth	Δλ	lf=20mA		20		

Notes:

1. Tolerance of Luminous Intensity is ±10%

2. Tolerance of Forward Voltage is ±0.05V

3. Tolerance of Dominant Wavelength is ±1nm

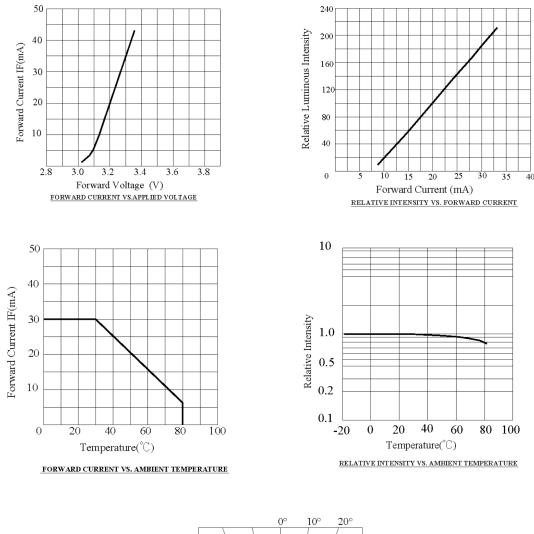


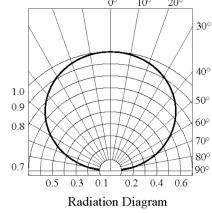
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# Typical Electrical/Optical Characteristic Curves

(25°C Ambient Temperature Unless Otherwise Noted)

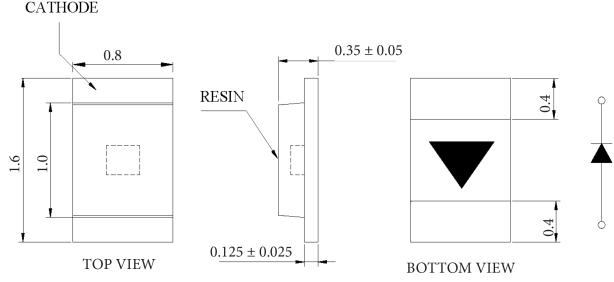






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#### Dimensions



Tolerance is ±0.1mm unless otherwise noted.

**Dimensions : Millimetres** 

### Precautions in use:

#### Storage

Recommend 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 vapor/ESD barrier bags. If the LEDs have exceeded the storage time, baking should be performed using the following conditions. Baking at : 60 ±5°C for 24 hours. Fold the opened bag firmly and keep in dry environment.

#### Soldering

#### **Reflow Soldering**

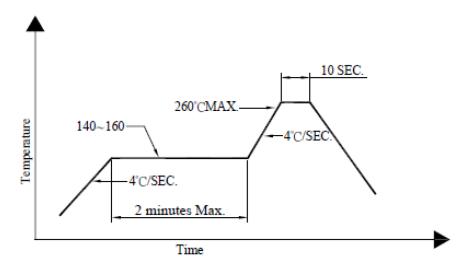
Recommend use of upper and lower heater type reflow furnace. 260°C Max for up to 5 seconds, one time only. Pre-heat is 150°C Max for up to 2 minutes Max. In case of screen-printing, keep metal mask thickness between 0.2mm and 0.3mm.

#### Cleaning

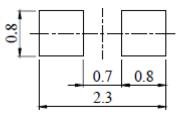
Surface condition of this device may change when organic solvents such as trichloroethylene or acetone were applied. Avoid using organic solvent. Recommend ultrasonic method 300W Max.



## **Reflow Temp/Time**



### **Reflow Soldering Pad Dimensions**



## Part Number Table

Description	Part Number	
Chip LED, Blue, 465nm, 130°, 100mcd, Surface Mount	MP008259	

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