# **0805 SMD Chip LED Super Blue**







### **Specifications**

Dice Material : InGaN
Emitted Colour : Super Blue
Lens Colour : Water Clear
Peak Wavelength : 470nm
Viewing Angle : 120 Deg.
Luminous Intensity (IV) : 72mcd

### Electrical / Optical Characteristics at TA = 25°C

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test
Luminous Intensity	IV	45	72	115	mcd	IF = 20mA
Viewing Angle	201/2		120		Deg.	
Peak Emission Wavelength	λр		470		nm	
Dominant Wavelength	λD	465	470	475	nm	
Spectral Line Half-Width	Δλ		45		nm	
Forward Voltage	VF	2.9	3.1	3.4	V	
Power Dissipation	Pd			85	mW	
Peak Forward Current (Duty1/10 @ 1kHz)	IF (Peak)			100	mA	
Recommended Operating Current	IF (Rec)		20		mA	

### Absolute Maximum Ratings (T<sub>A</sub> = 25°C)

Reverse Voltage : 5 Volt

Reverse Current :  $10\mu A$  (VR = 5V)

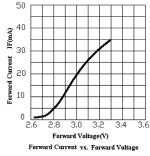
Electrostatics Discharge (ESD) : 200 Volt

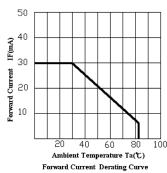
Operating Temperature Range : -40°C to +85°C Storage Temperature Range : -40°C to +100°C

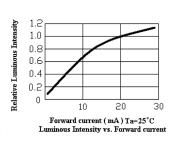
Lead Soldering Temperature Range : 260°C For 5 Seconds (1.6mm (1/16 inch) from body)

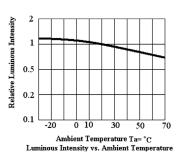
### Typical Electro-Optical Characteristics Curves

Super Blue (InGaN λP = 470nm)









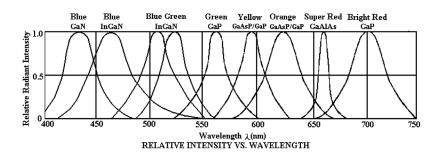
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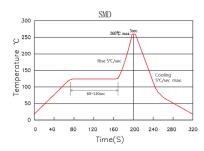




## Soldering

Recommended soldering condition as shown below:

#### Reflow Temperature/Time (SMD)

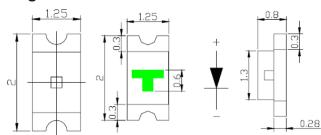


Soldering Iron

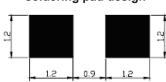
Temperature at tip of iron: 350°C Max.

Soldering Time: 3 sec.  $\pm$  1 sec. (one time only) If temperature is higher, time should be shorter

#### Diagram



Recommended soldering pad design



**Dimensions: Millimetres** 

### **Part Number Table**

Description	Part Number	
0805 SMD Chip LED, Super Blue, Water Clear Lens, 120°	MP000442	

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