

**RoHS  
Compliant**



## Specifications

|                         |               |
|-------------------------|---------------|
| Dice Material           | : InGaN       |
| Emitted Colour          | : Super Blue  |
| Lens Colour             | : Water Clear |
| Peak Wavelength         | : 470nm       |
| Viewing Angle           | : 130 Deg.    |
| Luminous Intensity (IV) | : 85mcd       |

## Electrical / Optical Characteristics at T<sub>A</sub> = 25°C

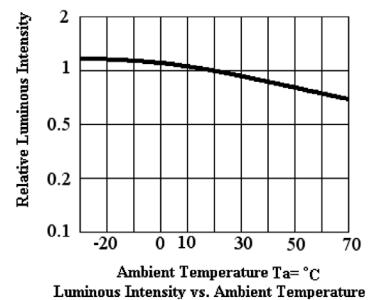
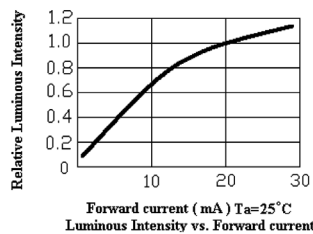
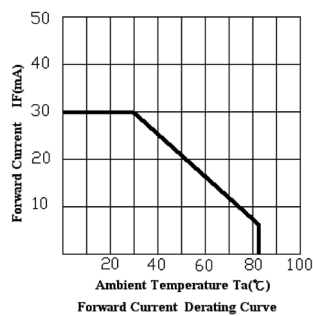
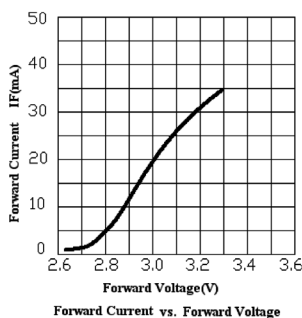
| Parameter                                  | Symbol         | Min. | Typ. | Max. | Unit | Test      |
|--|----------------|------|------|------|------|-----------|
| Luminous Intensity                         | IV             | 48   | 85   | 120  | mcd  | IF = 20mA |
| Viewing Angle                              | 2θ1/2          |      | 130  |      | Deg. |           |
| Peak Emission Wavelength                   | λ <sub>p</sub> |      | 470  |      | nm   |           |
| Dominant Wavelength                        | λ <sub>D</sub> | 463  | 470  | 475  | nm   |           |
| Spectral Line Half-Width                   | Δλ             |      | 45   |      | nm   |           |
| Forward Voltage                            | V <sub>F</sub> | 2.9  | 3.2  | 3.6  | V    |           |
| Power Dissipation                          | P <sub>d</sub> |      |      | 85   | mW   |           |
| Peak Forward Current<br>(Duty 1/10 @ 1kHz) | IF (Peak)      |      |      | 100  | mA   |           |
| Recommended Operating Current              | IF (Rec)       |      | 20   |      | mA   |           |

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

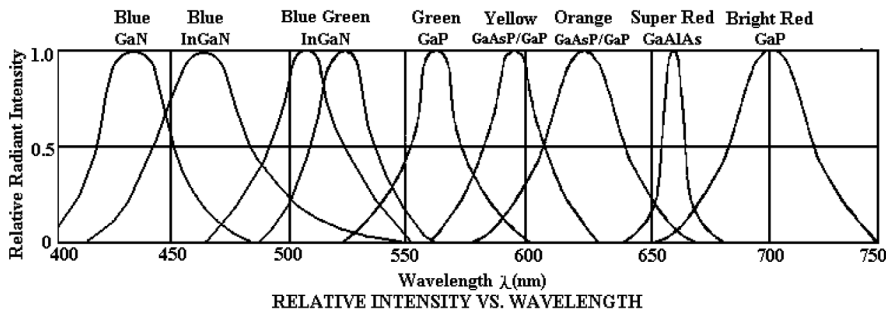
|                                  |                              |
|----------------------------------|------------------------------|
| Reverse Voltage                  | : 5 Volt                     |
| Reverse Current                  | : 10μA (V <sub>R</sub> = 5V) |
| Electrostatics Discharge (ESD)   | : 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        |

## Typical Electro-Optical Characteristics Curves

Super Blue (InGaN λ<sub>P</sub> = 470nm)



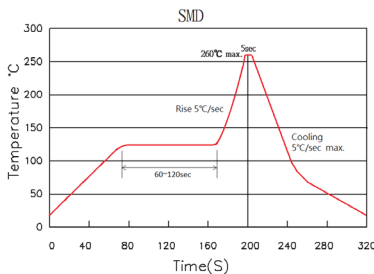
# 0603 SMD Chip LED Super Blue



## Soldering

Recommended soldering condition as shown below:

### Reflow Temperature/Time (SMD)

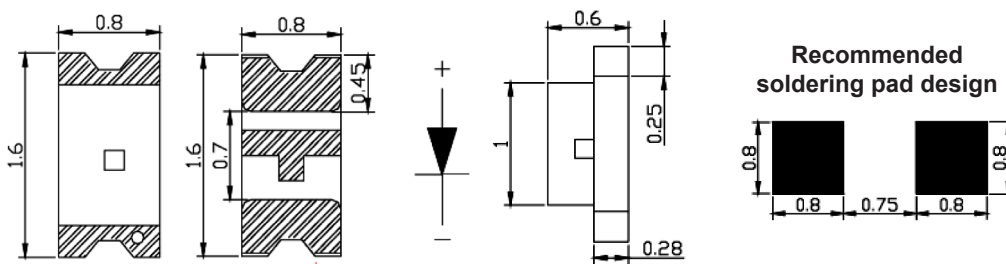


### Soldering Iron

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



Dimensions : Millimetres

## Part Number Table

| Description   | Part Number |
|---|-------------|
| 0603 SMD Chip LED, Super Blue, Water Clear Lens, 130° | MP000445    |

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