

Flangeless Rectangular LED

Super Blue, 2mm x 7mm

multicomp^{PRO}

RoHS
Compliant

Specifications

Dice Material : InGaN
Emitted colour : Super Blue
Lens colour : Blue Diffused
Peak wavelength : 470nm
Viewing angle : 120°
Luminous intensity (IV) : 150mcd

Electrical / Optical Characteristics at Ta = 25°C

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Condition |
|--------------------------|----------------|------|------|------|------|-----------|
| Luminous Intensity | IV | 100 | 150 | 180 | mcd | IF = 20mA |
| Viewing Angle | 2θ1/2 | | 120 | | deg | |
| Peak Emission Wavelength | λp | | 470 | | nm | |
| Dominant Wavelength | λD | 465 | 468 | 472 | nm | |
| Spectral Line Half-Width | Δλ | | 45 | | nm | |
| Forward Voltage | VF | 2.8 | 3.2 | 3.6 | V | VR=5V |
| Reverse Current | I _r | - | - | 10 | uA | |

▲ Luminous intensity (IV) ±10%, Forward Voltage (VF) ±0.1V, Wavelength (λd) ±0.5nm

Absolute Maximum Ratings: (Ta = 25°C)

| Parameter | Symbol | Rating | Unit |
|--|--------------------|--|------|
| Power Dissipation | P _d | 85 | mW |
| Peak Forward Current (Duty 1/10 @ 1KHZ) | IF (Peak) | 100 | mA |
| Recommended Operating Current | IF (Rec) | 30 | mA |
| Electrostatic Discharge | ESD _{HBM} | 200 | V |
| Operating Temperature Range | T _{OPR} | -40 to +85 | °C |
| Storage Temperature Range | T _{STG} | -40 to +100 | °C |
| Lead Soldering Temperature Range (1.6 mm (1/16 inch) from body) | | Reflow Soldering: 260°C for 5 sec. Hand Soldering: 350°C for 3 sec. | |

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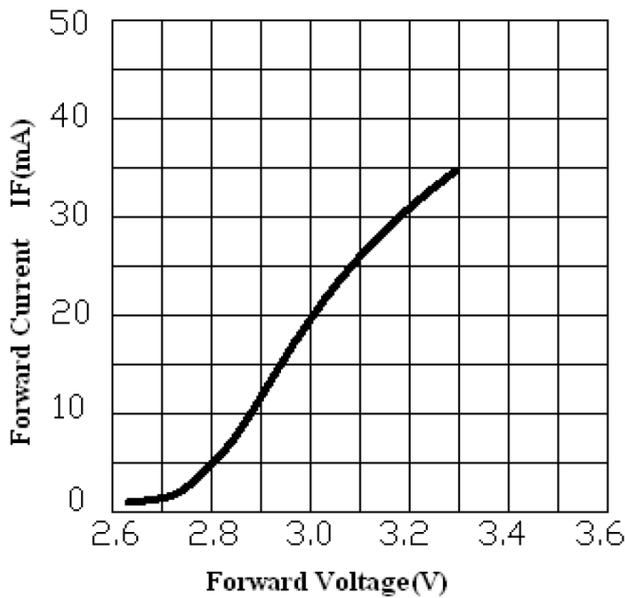
Flangeless Rectangular LED

Super Blue, 2mm x 7mm

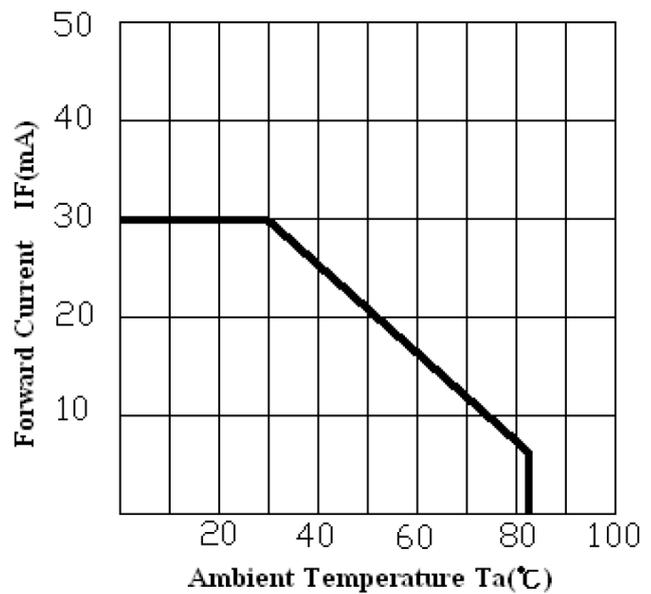
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Typical Electro-Optical Characteristics Curves

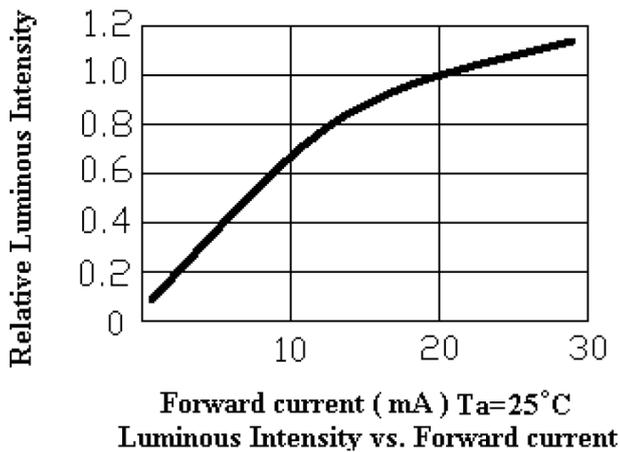
Super Blue (InGaN $\lambda_P=470\text{nm}$)



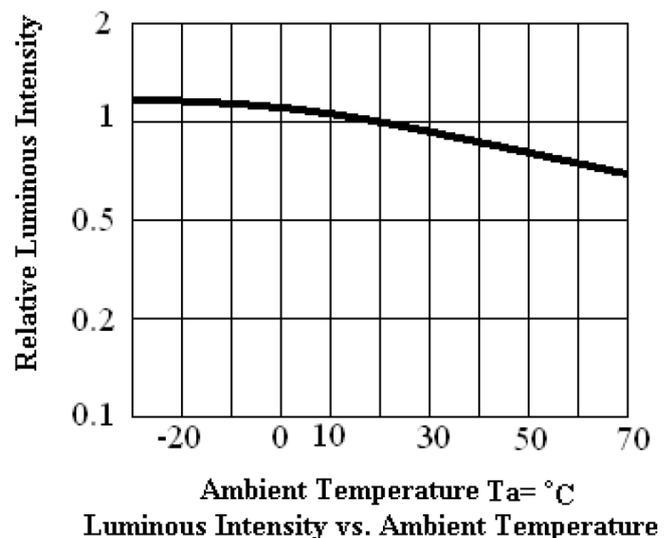
Forward Current vs. Forward Voltage



Forward Current Derating Curve



Luminous Intensity vs. Forward current

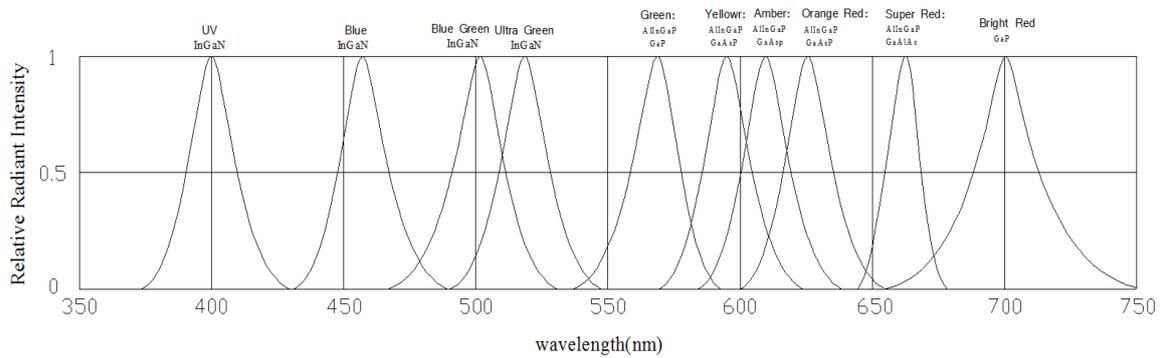


Luminous Intensity vs. Ambient Temperature

Flangeless Rectangular LED

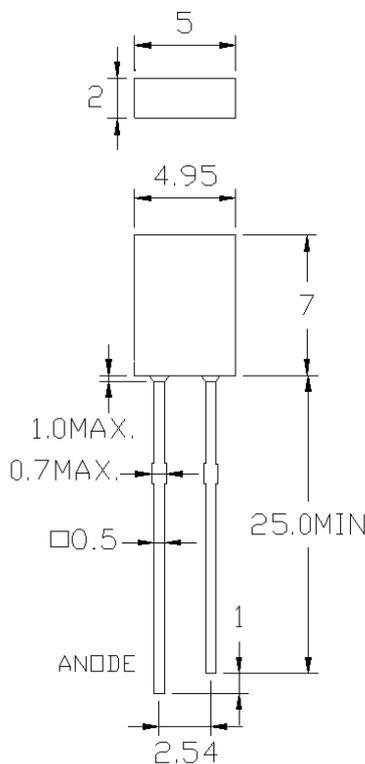
Super Blue, 2mm x 7mm

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Relative Intensity VS. wavelength

Dimensions



Dimensions : Millimetres

Part Number Table

| Description | Part Number |
|---|-------------|
| Flangeless Rectangular LED, Super Blue, 470nm, 120°, 150mcd, Through hole | MP007979 |

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