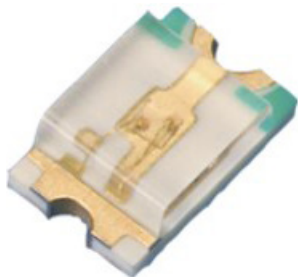


RoHS  
Compliant



## Features

- 1mm × 0.5mm SMD LED, 0.4mm thickness
- Low power consumption
- Wide view angle

## Applications

- Ideal for Back light and indicator
- Various colours and lens types available

## Specifications

Emitted colour : Blue  
Dice : InGaN/GaN  
Lens colour : Water transparent

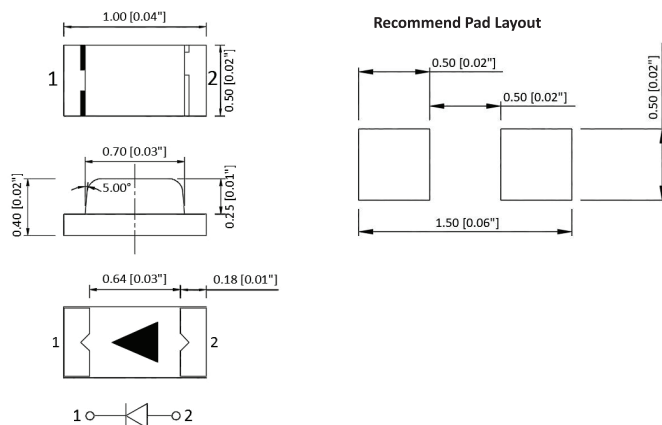
### Absolute Maximum Ratings: (T<sub>A</sub> = 25°C)

| Parameter                              | Symbol           | Value      | Unit |
|----------------------------------------|------------------|------------|------|
| Forward current                        | I <sub>f</sub>   | 30         | mA   |
| Reverse voltage                        | V <sub>r</sub>   | 5          | V    |
| Power dissipation                      | P <sub>d</sub>   | 108        | mW   |
| Operating Temperature                  | T <sub>op</sub>  | -40 to +85 | °C   |
| ESD (Huma-body mode)                   | -                | 2          | KV   |
| Storage Temperature                    | T <sub>STG</sub> | -40 to +85 | °C   |
| Peak pulsing current (1/8 duty f=1kHz) | I <sub>fp</sub>  | 125        | mA   |

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

| Parameter                           | Symbol            | Test Conditions      | Min. | Typ. | Max. | Unit |
|-------------------------------------|-------------------|----------------------|------|------|------|------|
| Wavelength at peak emission         | λ <sub>p</sub>    | I <sub>F</sub> =20mA | -    | 462  | -    | nm   |
| Spectral half-bandWidth             | Δλ                |                      | -    | 22   | -    |      |
| Dominant wavelength                 | λ <sub>d</sub>    |                      | 464  | -    | 474  |      |
| Forward Voltage                     | V <sub>f</sub>    |                      | 2.8  | -    | 3.6  | V    |
| Luminous intensity                  | I <sub>v</sub>    |                      | 100  | -    | 250  | mcd  |
| Viewing Angle at 50% I <sub>v</sub> | 2θ <sub>1/2</sub> | I <sub>F</sub> =10mA | -    | 120  | -    | Deg. |
| Reverse Current                     | I <sub>r</sub>    | V <sub>r</sub> =5V   | -    | -    | 10   | μA   |

## Package Outlines

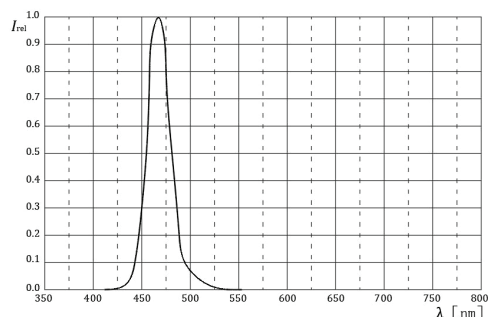


Dimensions : Millimetres (Inches)

## Typical Electrical/Optical Characteristics Curves

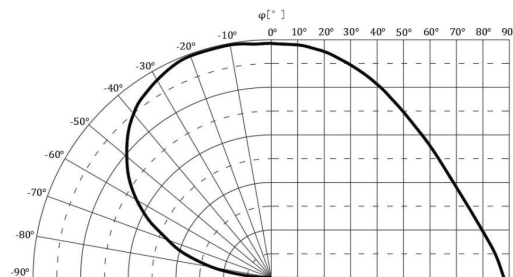
### Relative Spectral Emission

$I_F=20\text{mA}$ ,  $T_a=25^\circ\text{C}$



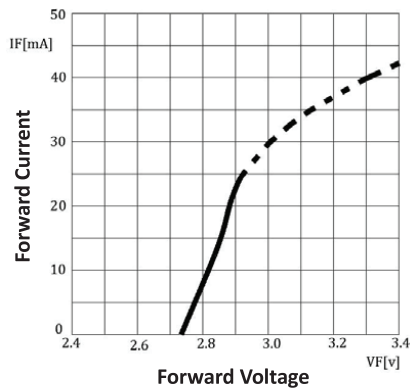
### Radiation Characteristics

$I_F=10\text{mA}$ ,  $T_a=25^\circ\text{C}$

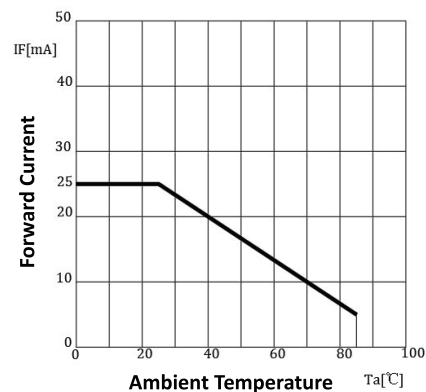


### Forward Current vs Forward Voltage

$T_a=25^\circ\text{C}$

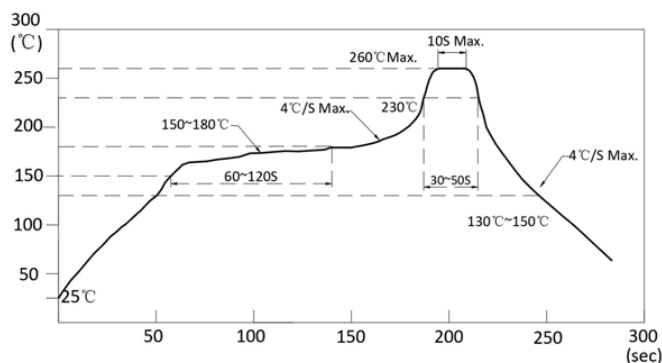


### Forward Current Derating Curve



## Reflow Profile

Reflow Temp/Time



### Notes:

- We recommend the reflow temperature 245°C ( $\pm 5^\circ\text{C}$ ). The maximum soldering temperature should be limited to 260°C.
- Don't cause stress to the epoxy resin while it is exposed to high temperature.
- Number of reflow process shall be 2 times or less.

## Part Number Table

| Description                   | Part Number |
|-------------------------------|-------------|
| Single Colour LED, 0402, Blue | MP017026    |

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