

RoHS  
Compliant

## Specifications

Dice material : InGaN/Sapphire  
Emmiting Colour : Blue  
Lens colour : Water clear  
Peak wavelength : 468nm  
Viewing angle : 130°  
Luminous intensity (IV) : 180mcd

## Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Power Dissipation	PD	102	mW
Reverse Voltage	VR	5	V
D.C Forward current	If	30	mA
Peak Current (1/10Duty Cycle,0.1ms Pulse Width.)	If(Peak)	80	mA
Operating Temperature	Topr.	-30 to +80	°C
Storage Temperature	Tstg.	-40 to +85	°C
Soldering Temperature (1.6mm from body)	Tsol	Reflow Soldering : 260oC for 10 sec.	

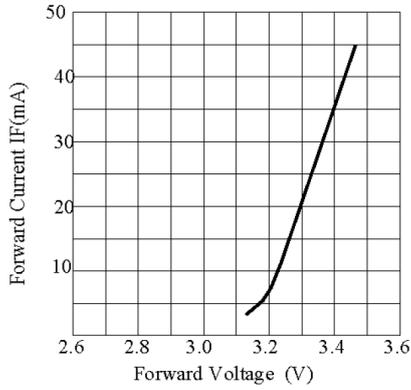
## Electrical and Optical Characteristics

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	110	180		mcd
Forward Voltage	Vf	If=20mA		3	3.4	V
Peak Wavelength	$\lambda_p$	If=20mA		468		nm
Dominant Wavelength	$\lambda_d$	If=20mA		465		nm
Reverse Current	Ir	Vr=5V			50	$\mu$ A
Viewing Angle	2 $\theta$ 1/2	If=20mA		130		deg
Spectrum Line Halfwidth	$\Delta\lambda$	If=20mA		26		nm

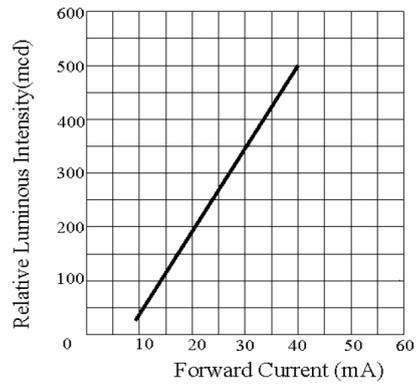
### Notes:

1. Tolerance of Luminous Intensity is  $\pm 15\%$
2. Tolerance of Forward Voltage is  $\pm 0.1V$
3. Tolerance of Dominant Wavelength is  $\pm 1nm$

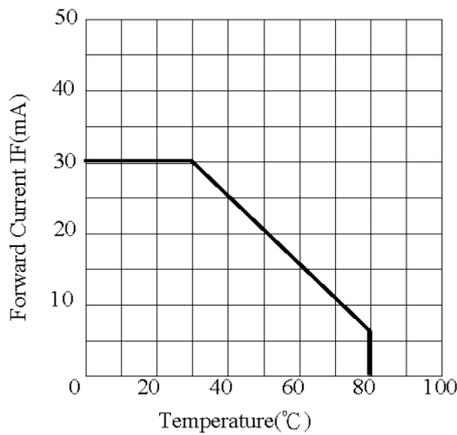
## Typical Electrical/Optical Characteristic Curves (25°C Ambient Temperature Unless Otherwise Noted)



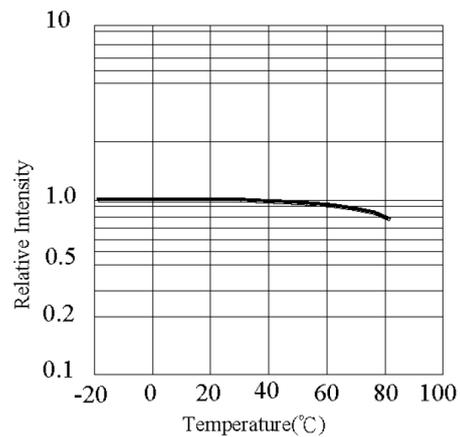
FORWARD CURRENT VS. APPLIED VOLTAGE



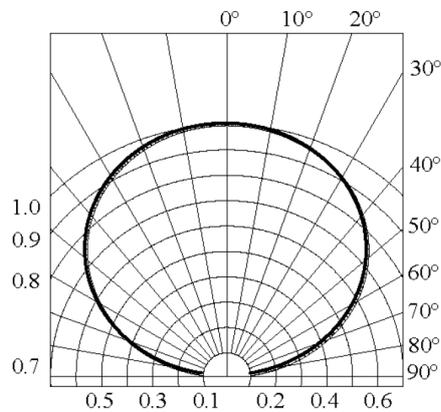
RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



FORWARD CURRENT VS. AMBIENT TEMPERATURE

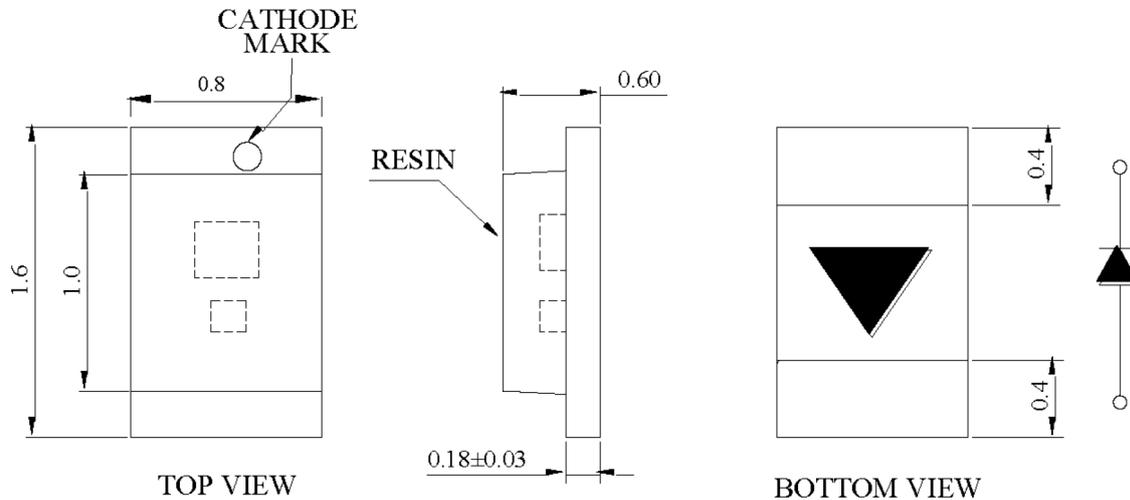


RELATIVE INTENSITY VS. AMBIENT TEMPERATURE



RADIATION DIAGRAM

## Dimensions



Tolerance is  $\pm 0.1$ mm 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.

Moisture measures: Please refer to Moisture-sensitive label on reels package bags.

If unused LEDs remain, they should be stored in moisture proof packages, such as sealed container with packages of moisture absorbent material (silica gel). It is also recommended to return the LEDs to the original moisture proof bag and to reseal the moisture proof bag again. Fold the opened bag firmly and keep in dry environment.

### Soldering

#### Reflow Soldering

Reflow soldering - Recommend use of upper and lower heater type reflow furnace.

260°C Max for up to 10 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.

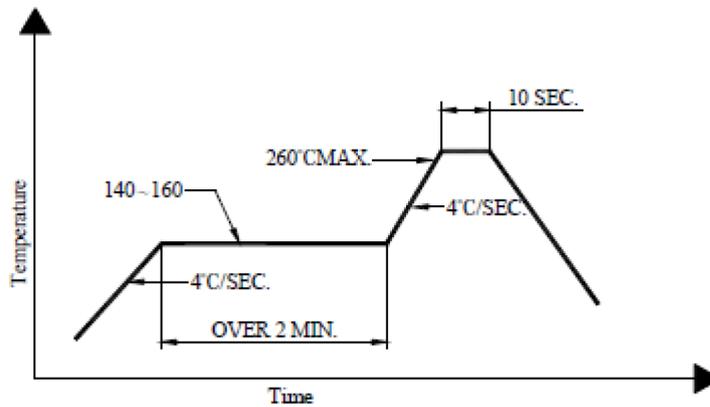
#### Cleaning

Surface condition of this device may change when organic solvents such as trichloroethylene or acetone were applied.

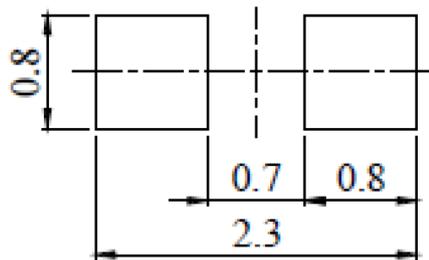
Avoid using organic solvent.

Recommend ultrasonic method 300W Max.

## Reflow Temp/Time



## Reflow Soldering Pad Dimensions



## Part Number Table

Description	Part Number
Chip LED, Blue, 468nm, 130°, 180mcd, Surface Mount	MP008254

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