

## GHB-GW20-B

### Features

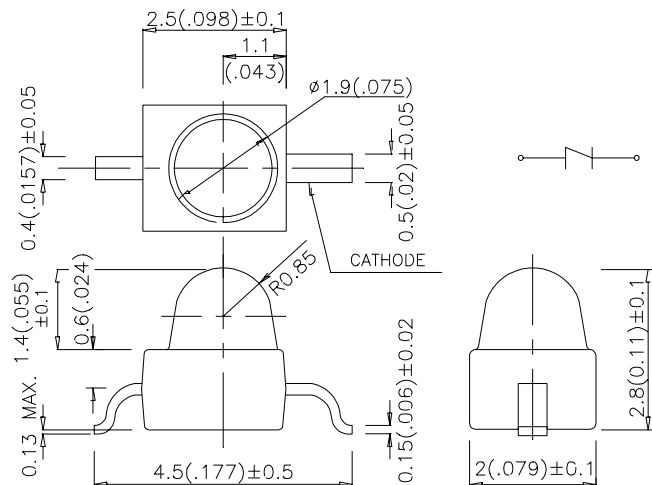
- ▣ SUBMINIATURE PACKAGE.
- ▣ WIDE VIEWING ANGLE.
- ▣ LONG LIFE - SOLID STATE RELIABILITY.
- ▣ LOW PACKAGE PROFILE.
- ▣ PACKAGE: 1000PCS / REEL.

### Package Dimensions

### Description

The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

### SUBMINIATURE SOLID STATE LAMP



### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $0.25(0.01)$  unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

| Part No.   | Dice         | Lens Type   | I <sub>v</sub> (mcd)<br>@ 20 mA |      | Viewing<br>Angle |
|------------|--------------|-------------|---------------------------------|------|------------------|
|            |              |             | Min.                            | Typ. |                  |
| GHB-GW20-B | BLUE (InGaN) | WATER CLEAR | 110                             | 250  | 20°              |

Note:

- 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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

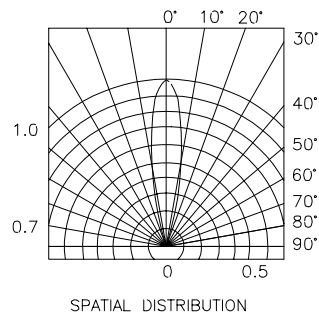
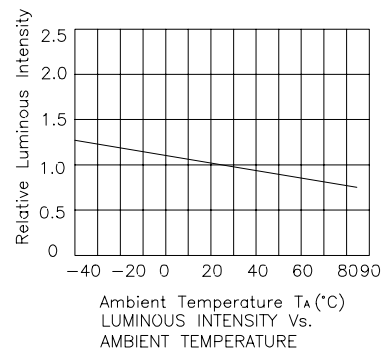
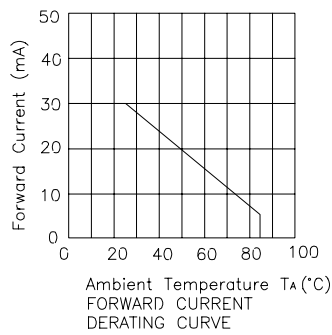
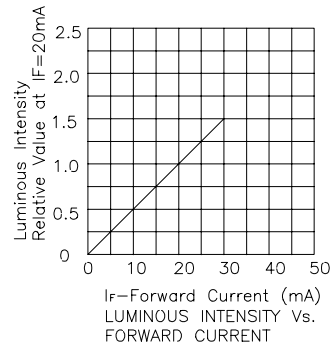
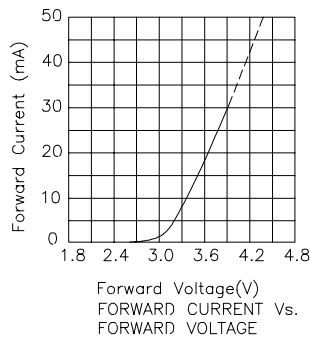
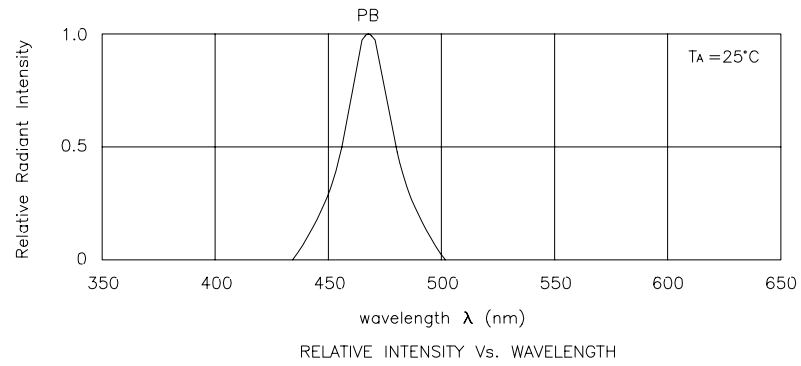
| Symbol         | Parameter                | Device | Typ. | Max. | Units | Test Conditions            |
|----------------|--------------------------|--------|------|------|-------|----------------------------|
| peak           | Peak Wavelength          | Blue   | 468  |      | nm    | I <sub>F</sub> =20mA       |
| D              | Dominant Wavelength      | Blue   | 470  |      | nm    | I <sub>F</sub> =20mA       |
| 1/2            | Spectral Line Half-width | Blue   | 25   |      | nm    | I <sub>F</sub> =20mA       |
| C              | Capacitance              | Blue   | 65   |      | pF    | V <sub>F</sub> =0V, f=1MHz |
| V <sub>F</sub> | Forward Voltage          | Blue   | 3.65 | 4.2  | V     | I <sub>F</sub> =20mA       |
| I <sub>R</sub> | Reverse Current          | Blue   |      | 10   | uA    | V <sub>R</sub> = 5V        |

## Absolute Maximum Ratings at T<sub>A</sub>=25 C

| Parameter                     | Blue           | Units |
|-------------------------------|----------------|-------|
| Power dissipation             | 102            | mW    |
| DC Forward Current            | 30             | mA    |
| Peak Forward Current [1]      | 160            | mA    |
| Reverse Voltage               | 5              | V     |
| Operating/Storage Temperature | -40 C To +85 C |       |

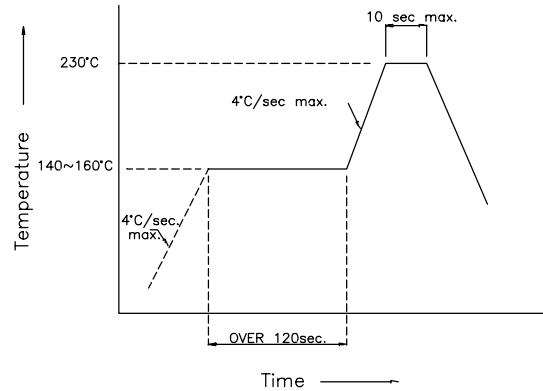
Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

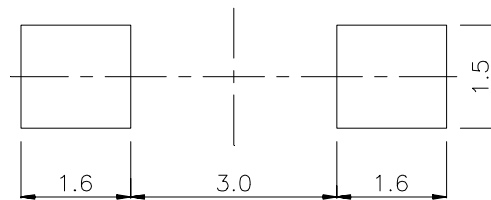


## SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



## Recommended Soldering Pattern (Units : mm)



## Tape Specifications (Units : mm)

