

### Features

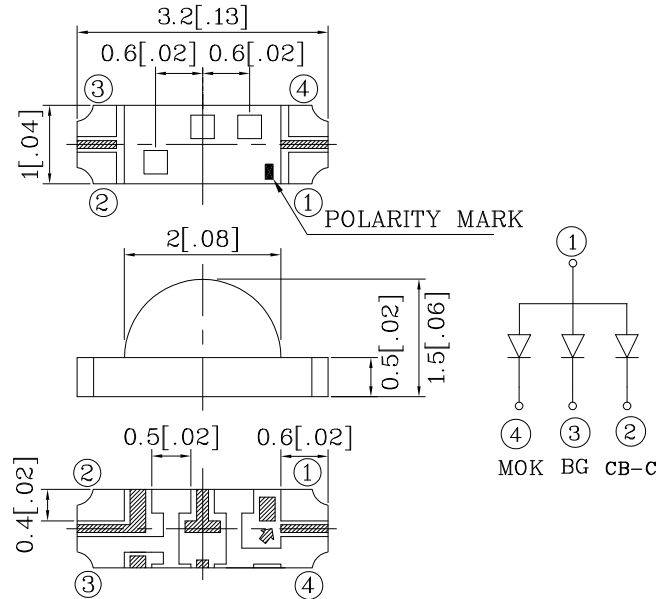
- LOW POWER CONSUMPTION.
- 3.2mmX1.0mm RIGHT ANGLE SMT LED,1.5mm THICKNESS.
- WIDE VIEWING ANGLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

#### Notes:

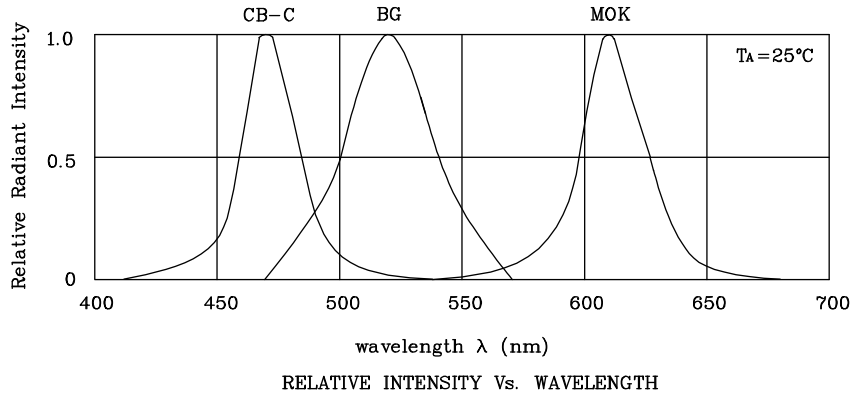
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004")$  unless otherwise noted.



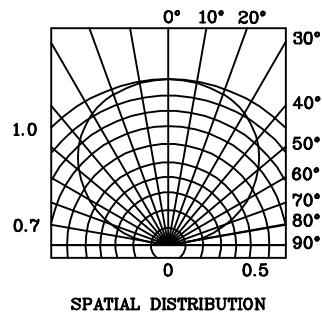
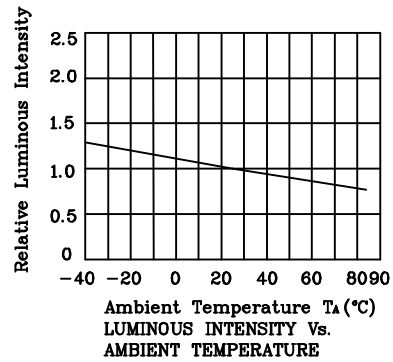
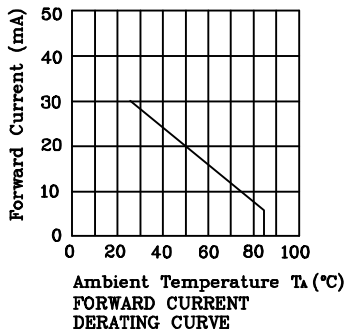
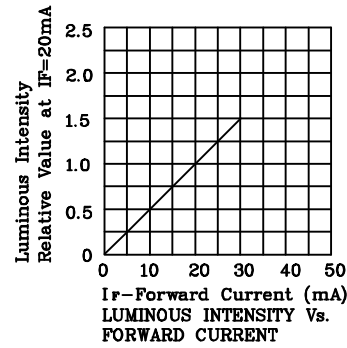
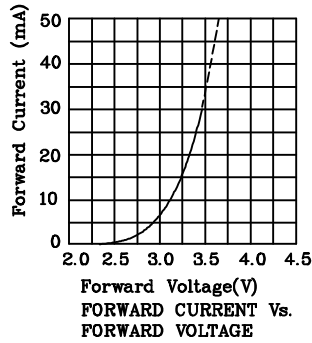
| Absolute maximum ratings<br>(TA=25°C)                          |                  | CB-C<br>(GaN) | BG<br>(InGaN) | MOK<br>(InGaAlP) | Unit |
|--|------------------|---------------|---------------|------------------|------|
| Reverse Voltage  | V <sub>R</sub>   | 5             | 5             | 5                | V    |
| Forward Current  | I <sub>F</sub>   | 30            | 30            | 30               | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | iFS              | 150           | 150           | 195              | mA   |
| Power Dissipation  | P <sub>T</sub>   | 105           | 105           | 75               | mW   |
| Operating Temperature  | T <sub>A</sub>   | -40 ~ +85     |               |                  | °C   |
| Storage Temperature  | T <sub>stg</sub> | -40 ~ +85     |               |                  |      |

| Operating Characteristics<br>(TA=25°C)                                |                | CB-C<br>(GaN) | BG<br>(InGaN) | MOK<br>(InGaAlP) | Unit |
|---|----------------|---------------|---------------|------------------|------|
| Forward Voltage (Typ.)<br>(I <sub>F</sub> =20mA)                      | V <sub>F</sub> | 3.3           | 3.5           | 2.1              | V    |
| Forward Voltage (Max.)<br>(I <sub>F</sub> =20mA)                      | V <sub>F</sub> | 4.0           | 4.5           | 2.5              | V    |
| Reverse current<br>(V <sub>R</sub> =5V)                               | I <sub>R</sub> | 10            | 10            | 10               | μA   |
| Wavelength of Peak<br>Emission<br>(I <sub>F</sub> =20mA)              | λ <sub>P</sub> | 470           | 520           | 610              | nm   |
| Wavelength of Dominant<br>emission<br>(I <sub>F</sub> =20mA)          | λ <sub>D</sub> | 470           | 525           | 601              | nm   |
| Spectral Line Full Width<br>At Half-Maximum<br>(I <sub>F</sub> =20mA) | Δλ             | 25            | 38            | 29               | nm   |
| Capacitance<br>(V <sub>F</sub> =0V, f=1MHz)                           | C              | 105           | 45            | 15               | pF   |

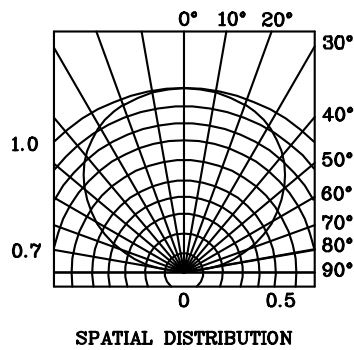
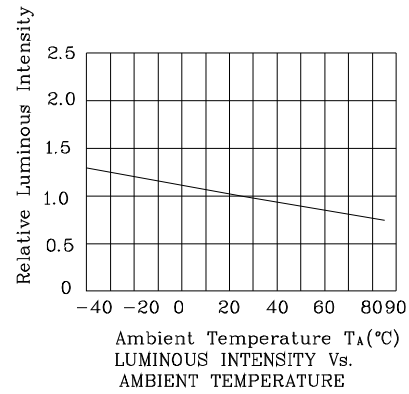
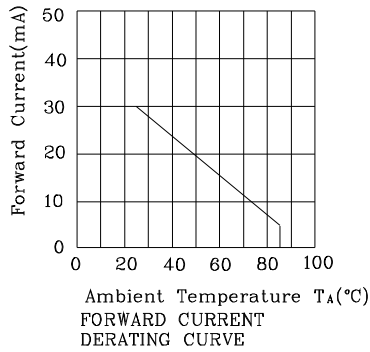
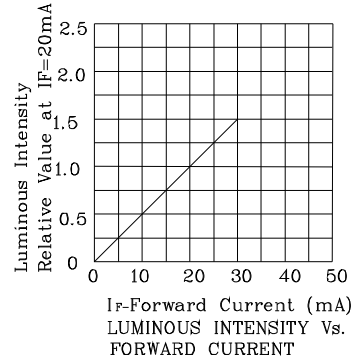
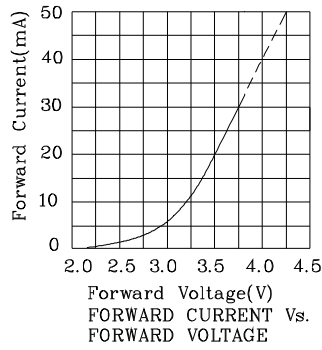
| Part Number   | Emitting Color | Emitting Material | Lens-color  | Luminous Intensity<br>(I <sub>F</sub> =20mA)<br>mcd |      | Wavelength<br>nm<br>λ <sub>P</sub> | Viewing Angle<br>2 θ 1/2 |
|---------------|----------------|-------------------|-------------|---|------|------------------------------------|--------------------------|
|               |                |                   |             | min.  | typ. |                                    |                          |
| XZCBCBGMOK88W | Blue           | GaN               | Water Clear | 36  | 69   | 470                                | 130°                     |
|               | Green          | InGaN             |             | 50  | 198  | 520                                |                          |
|               | Orange         | InGaAlP           |             | 70  | 198  | 610                                |                          |



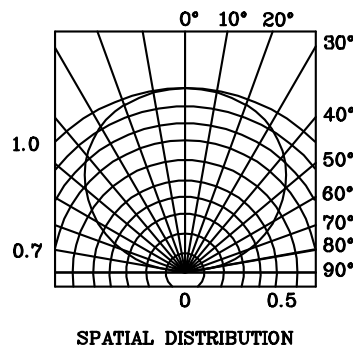
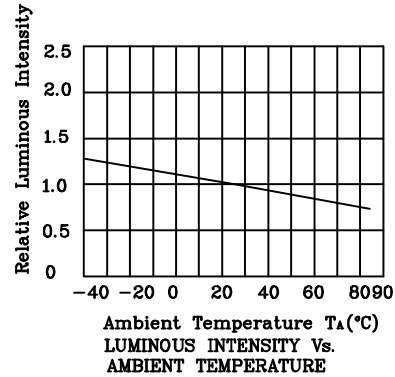
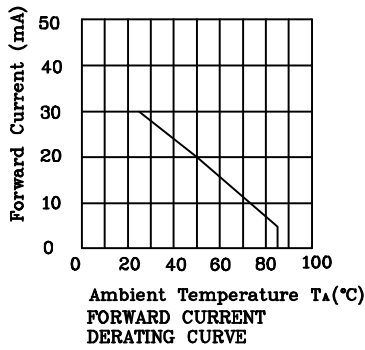
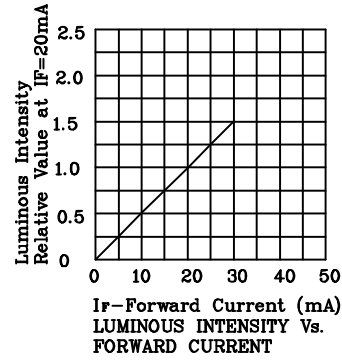
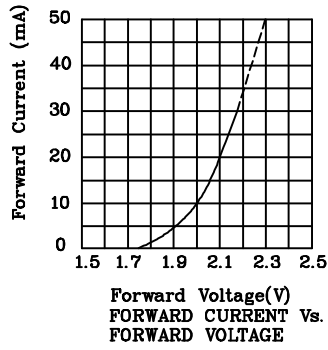
❖ CB-C



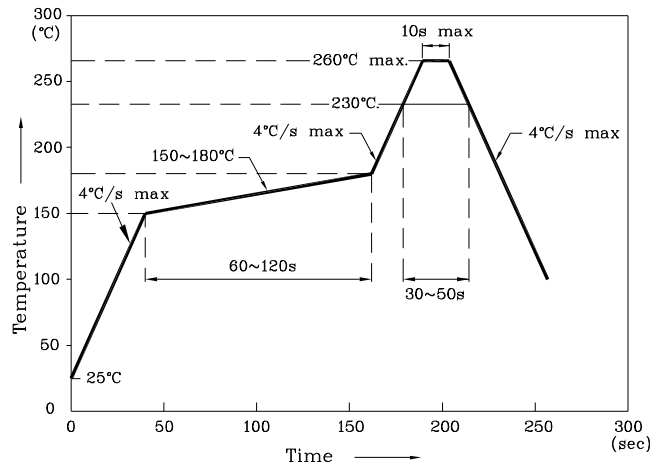
❖ BG



❖ MOK



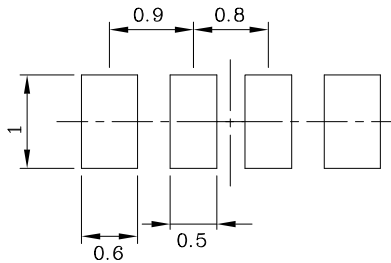
Reflow Soldering Profile For Lead-free SMT Process.



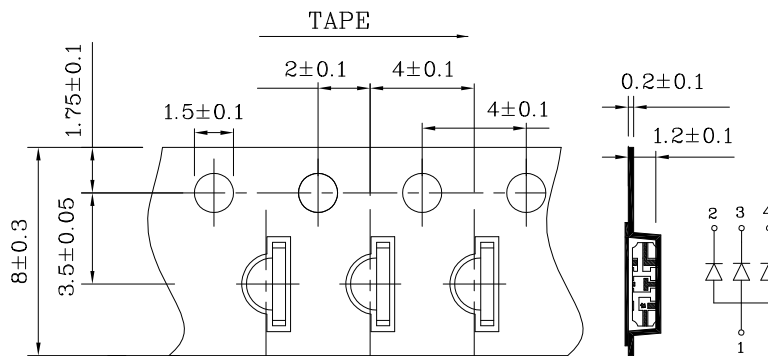
Notes:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C–260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

❖ Recommended Soldering Pattern (Units : mm;Tolerance: ± 0.1)



❖ Tape Specification (Units : mm)



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.