

Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 4,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant

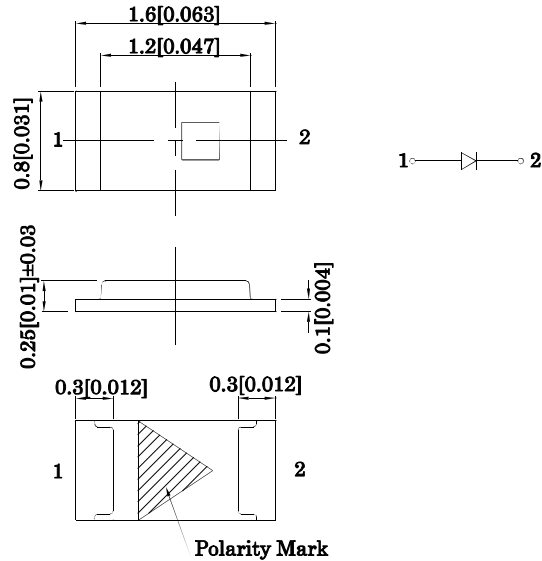


ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Applications

- 1.Mobile phone Keypad indicator and backlight
- 2.Flat backlight for LCD, switch and symbol
- 3.Toys

Package Schematics



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.1(0.004") unless otherwise noted.
3. Specifications are subject to change without notice.

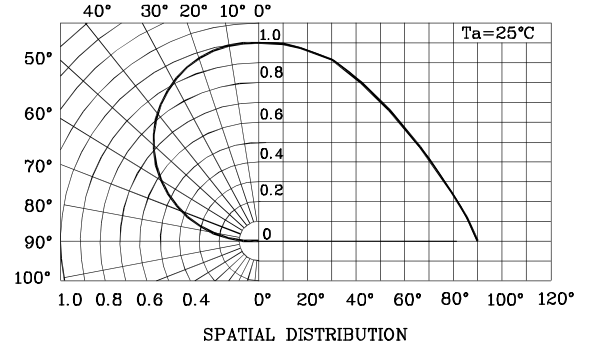
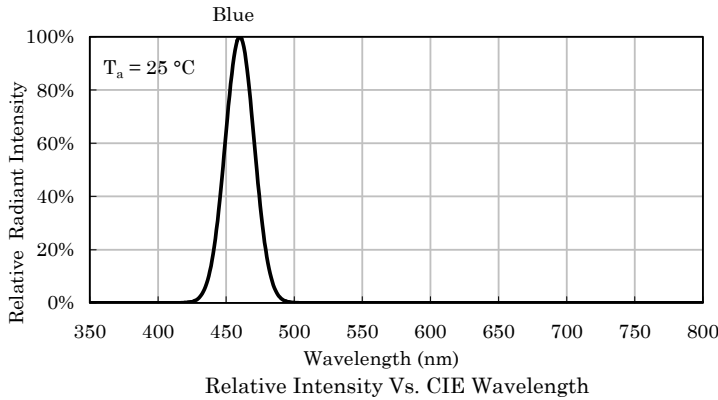
| Absolute Maximum Ratings (T _A =25°C) | | Blue (InGaN) | Unit |
|--|------------------|-----------------|------|
| Reverse Voltage | V _R | 5 | V |
| Forward Current | I _F | 30 | mA |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | i _{FS} | 150 | mA |
| Power Dissipation | P _D | 120 | mW |
| Operating Temperature | T _A | -40 ~ +85 | °C |
| Storage Temperature | T _{stg} | -40 ~ +85 | |
| Electrostatic Discharge Threshold (HBM) | | 250 | V |

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

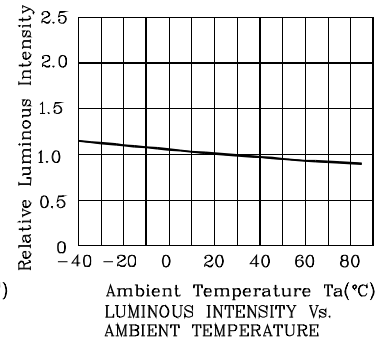
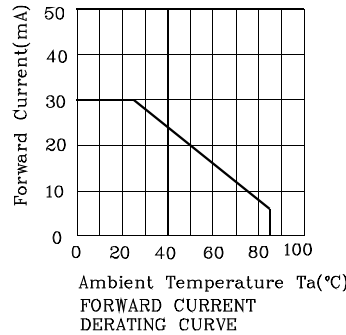
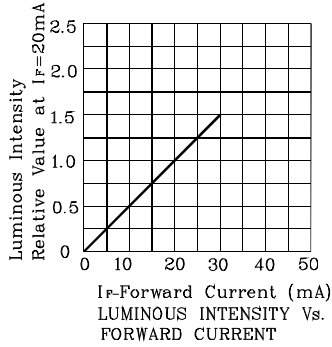
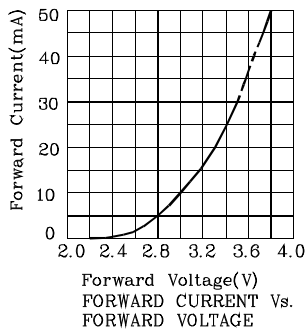
| Operating Characteristics (T _A =25°C) | | Blue (InGaN) | Unit |
|---|----------------|-----------------|------|
| Forward Voltage (Typ.) (I _F =20mA) | V _F | 3.3 | V |
| Forward Voltage (Max.) (I _F =20mA) | V _F | 4 | V |
| Reverse Current (Max.) (V _R =5V) | I _R | 50 | uA |
| Wavelength of Peak Emission CIE127-2007*(Typ.) (I _F =20mA) | λ _P | 460* | nm |
| Wavelength of Dominant Emission CIE127-2007*(Typ.) (I _F =20mA) | λ _D | 465* | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA) | Δλ | 25 | nm |
| Capacitance (Typ.) (V _F =0V, f=1MHz) | C | 100 | pF |

| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity CIE127-2007* (I _F =20mA) mcd | | Wavelength CIE127-2007* nm λ _P | Viewing Angle 2θ 1/2 |
|-------------|----------------|-------------------|-------------|---|------|--|-------------------------|
| | | | | min. | typ. | | |
| XZCBD53W-6 | Blue | InGaN | Water Clear | 40* | 98* | 460* | 130° |

*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

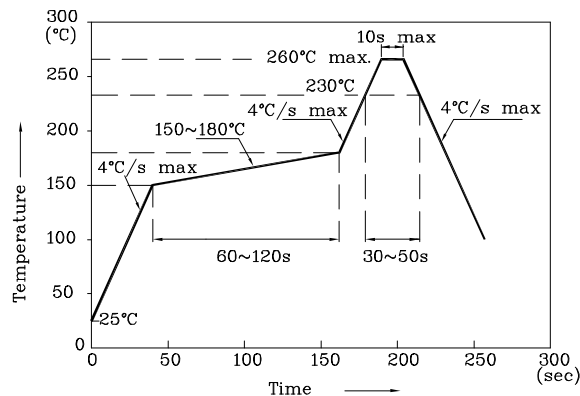


❖ Blue



LED is recommended for reflow soldering and soldering profile is shown below.

Reflow Soldering Profile for SMD Products (Pb-Free Components)

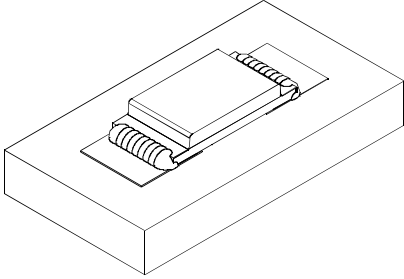


Notes:

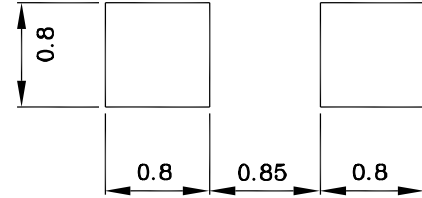
1. Maximum soldering temperature should not exceed 260°C
2. Recommended reflow temperature: 245°C-260°C
3. Do not put stress to the epoxy resin during high temperatures conditions



❖ The device has a single mounting surface.
The device must be mounted according to the specifications.

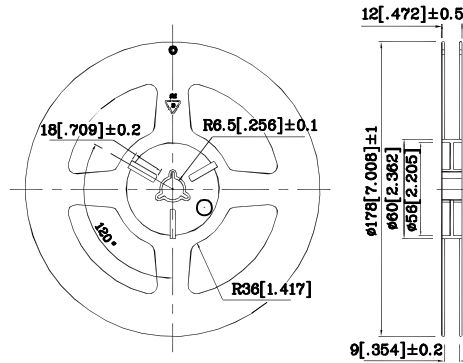


❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)

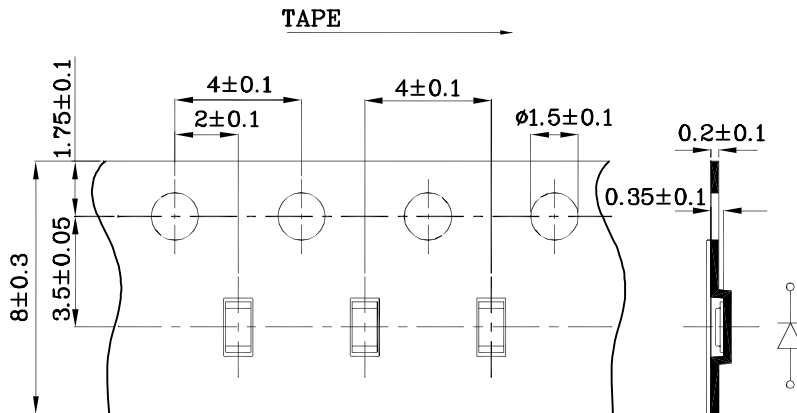


Mask open area ratio:80%
Mask thickness:80~100um

❖ Reel Dimension



❖ Tape Specification (Units : mm)



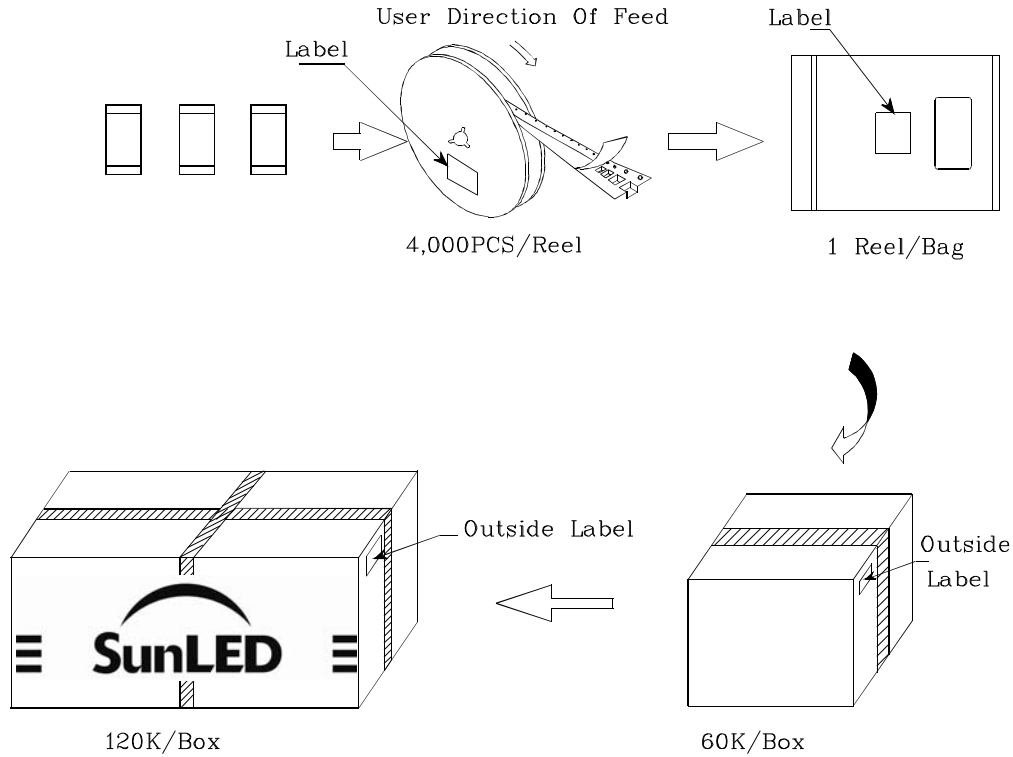
Remarks:



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

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

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS



| | | | | | | | | |
|--|----------|---|------|-----|----|----------|--------|--|
|  | | <table border="1"> <tr> <td>Q.C.</td> <td>Q C</td> </tr> <tr> <td>XX</td> <td>XX. XXXX</td> </tr> <tr> <td colspan="2" style="text-align: center;">PASSED</td> </tr> </table> | Q.C. | Q C | XX | XX. XXXX | PASSED | |
| Q.C. | Q C | | | | | | | |
| XX | XX. XXXX | | | | | | | |
| PASSED | | | | | | | | |
| P/NO : XZxxx53x | | | | | | | | |
| QTY : 4,000 PCS | | CODE: XXX | | | | | | |
| S/N : XX | | | | | | | | |
| LOT NO: | | | | | | | | |
|  XXXXXXXXXXXXXXXXXXXXXXXXXXXX | | | | | | | | |
| RoHS Compliant | | | | | | | | |

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