

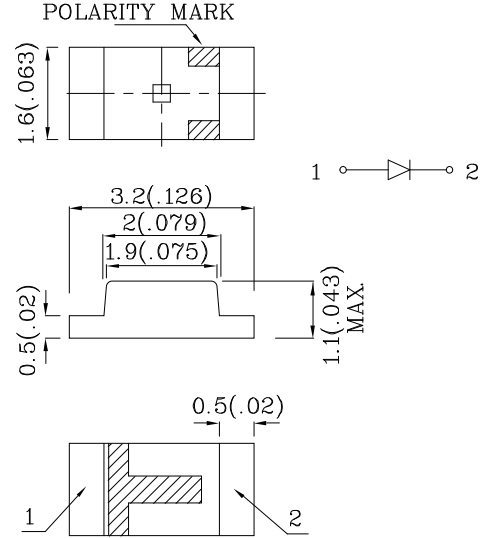
### Features

- 3.2mmx1.6mm SMT LED, 1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



### Notes:

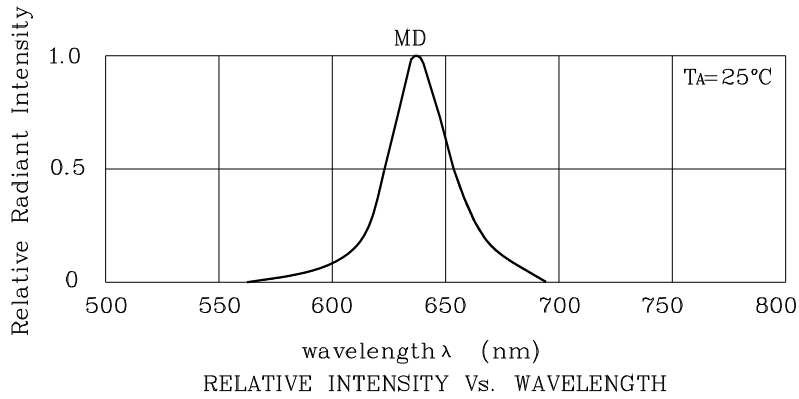
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$ " unless otherwise noted.
3. Specifications are subject to change without notice.



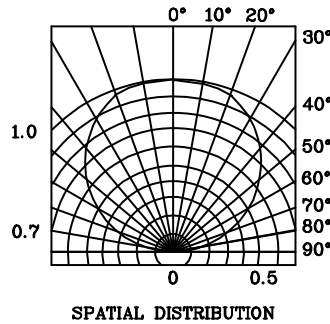
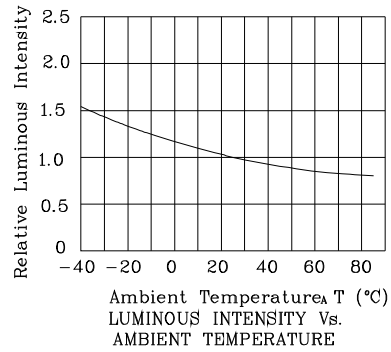
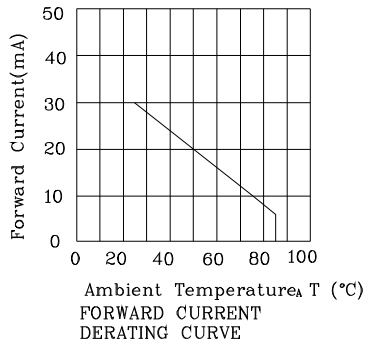
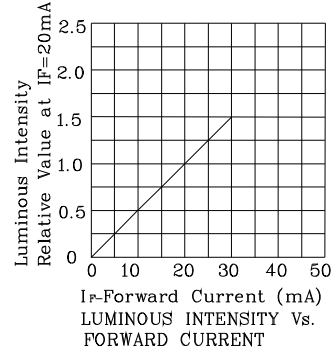
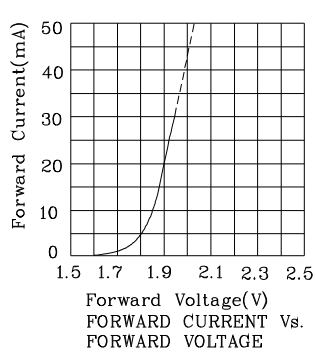
| Absolute Maximum Ratings<br>(TA=25°C)                          |                  | MD<br>(InGaAlP) | Unit |
|--|------------------|-----------------|------|
| Reverse Voltage  | V <sub>R</sub>   | 5               | V    |
| Forward Current  | I <sub>F</sub>   | 30              | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | i <sub>FS</sub>  | 185             | mA   |
| Power Dissipation  | P <sub>T</sub>   | 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)                                       |                | MD<br>(InGaAlP) | Unit |
|--|----------------|-----------------|------|
| Forward Voltage (Typ.)<br>(I <sub>F</sub> =20mA)                             | V <sub>F</sub> | 1.9             | V    |
| Forward Voltage (Max.)<br>(I <sub>F</sub> =20mA)                             | V <sub>F</sub> | 2.5             | V    |
| Reverse Current (Max.)<br>(V <sub>R</sub> =5V)                               | I <sub>R</sub> | 10              | uA   |
| Wavelength of Peak<br>Emission (Typ.)<br>(I <sub>F</sub> =20mA)              | λ P            | 640             | nm   |
| Wavelength of Dominant<br>Emission (Typ.)<br>(I <sub>F</sub> =20mA)          | λ D            | 628             | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(I <sub>F</sub> =20mA) | Δλ             | 27              | nm   |
| Capacitance (Typ.)<br>(V <sub>F</sub> =0V, f=1MHz)                           | C              | 45              | pF   |

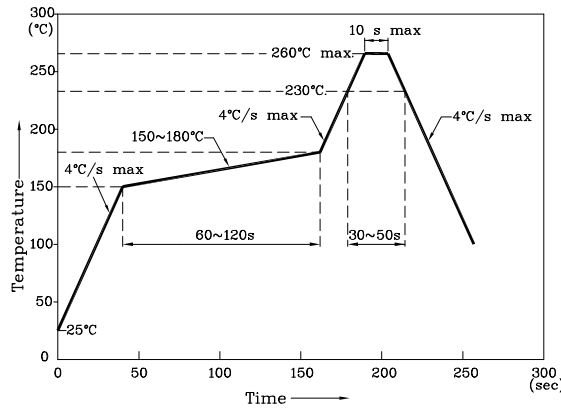
| Part<br>Number | Emitting<br>Color | Emitting<br>Material | Lens-color  | Luminous<br>Intensity<br>(I <sub>F</sub> =20mA)<br>mcd |      | Wavelength<br>nm<br>λ P | Viewing<br>Angle<br>2 θ 1/2 |
|----------------|-------------------|----------------------|-------------|--|------|-------------------------|-----------------------------|
|                |                   |                      |             | min.   | typ. |                         |                             |
| XZMD55W        | Red               | InGaAlP              | Water Clear | 70   | 198  | 640                     | 120°                        |



❖ MD



Reflow Soldering Profile For Lead-free SMT Process.

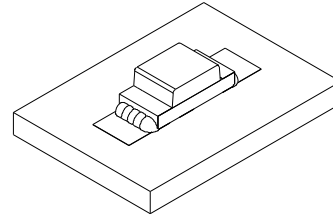
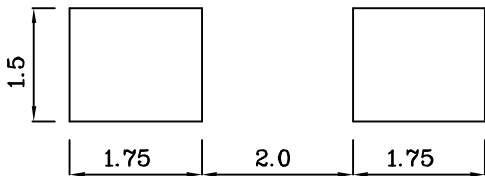


NOTES:

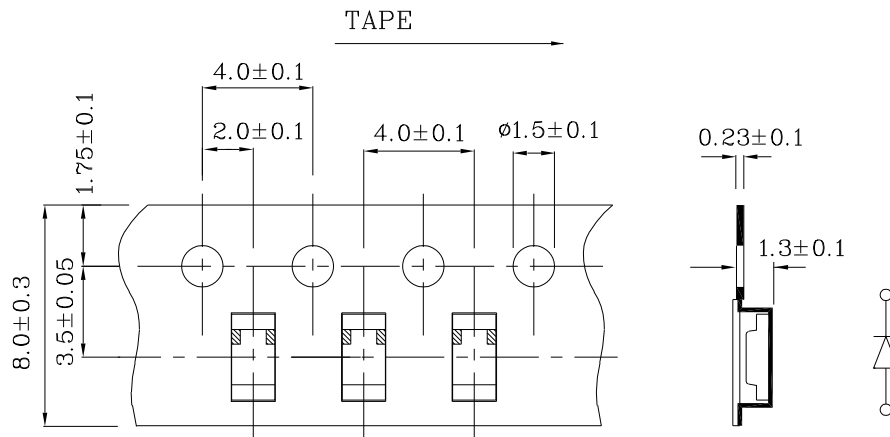
1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

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

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



❖ Tape Specification (Units : mm)



Remarks:

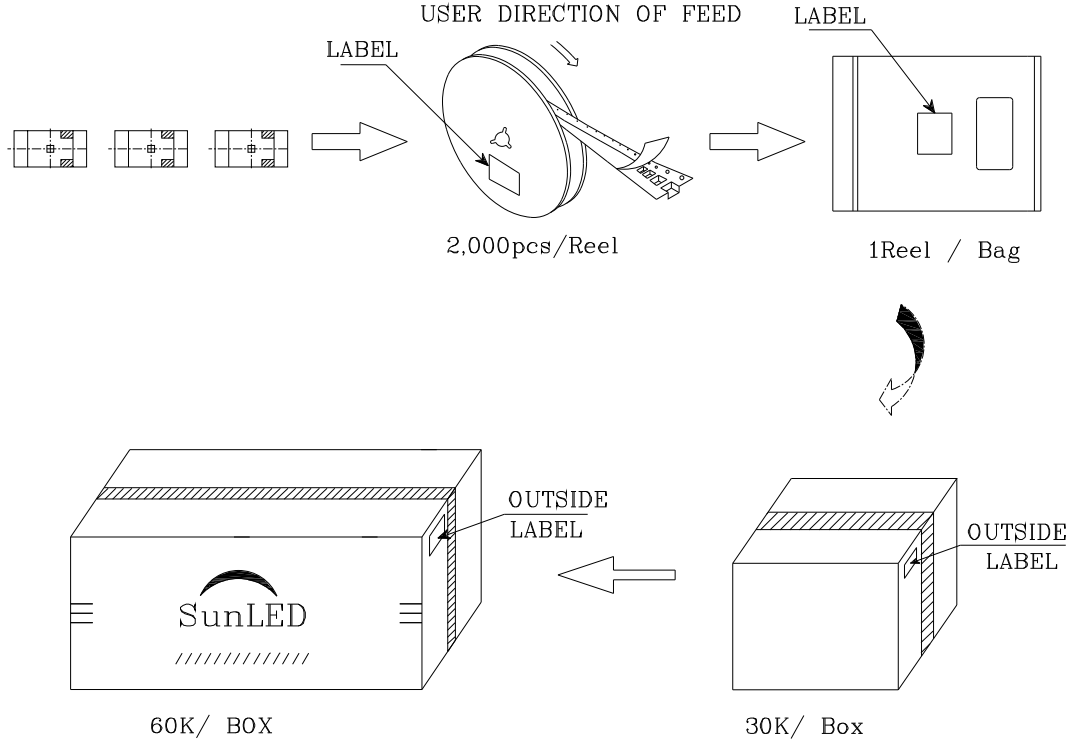

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

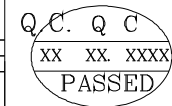

1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**XZMD55W**

|  |           |
|--|-----------|
|                              |           |
| P/NO : XZxxx55x  |           |
| QTY : 2,000 pcs  | CODE: XXX |
| S/N : XX   |           |
| LOT NO:  |           |
| <br>xxxxxxxxxxxxxxxxxxxxxxxx |           |
| RoHS Compliant   |           |