

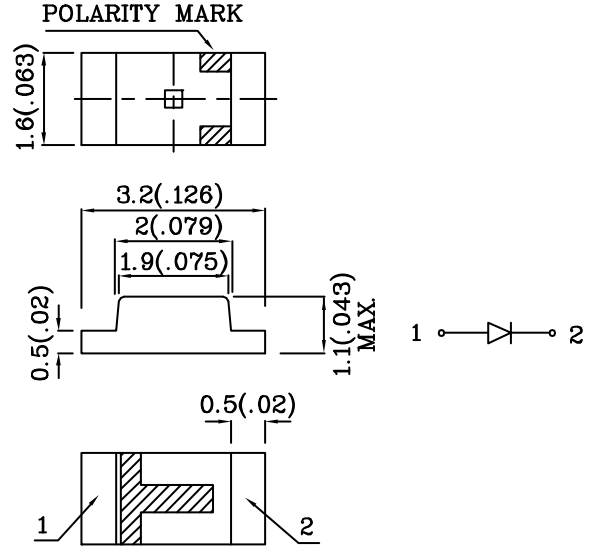
### Features

- 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:

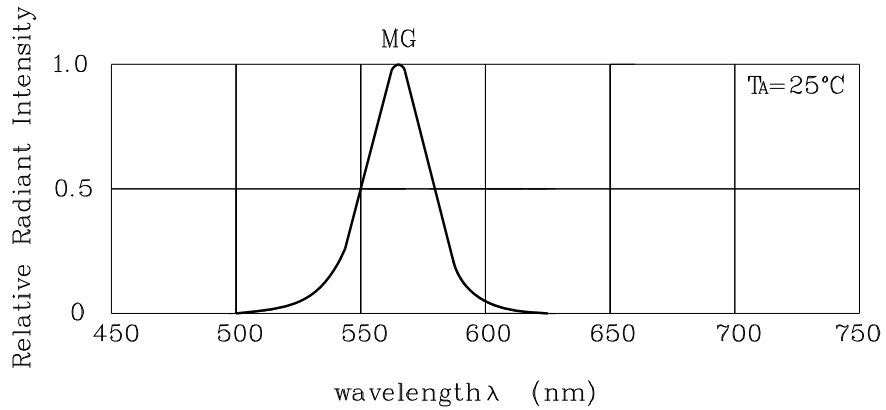
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$ " unless otherwise noted.
3. Specifications are subject to change without notice.



| Absolute Maximum Ratings<br>(TA=25°C)                          |                  | MG<br>(GaP) | Unit |
|--|------------------|-------------|------|
| Reverse Voltage  | V <sub>R</sub>   | 5           | V    |
| Forward Current  | I <sub>F</sub>   | 25          | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | i <sub>FS</sub>  | 140         | mA   |
| Power Dissipation  | P <sub>T</sub>   | 62.5        | mW   |
| Operating Temperature  | T <sub>A</sub>   | -40 ~ +85   | °C   |
| Storage Temperature  | T <sub>stg</sub> | -40 ~ +85   |      |

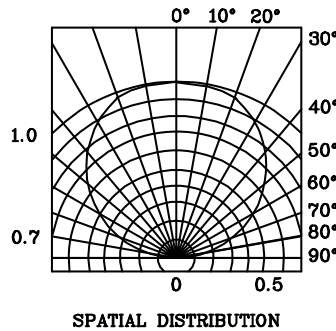
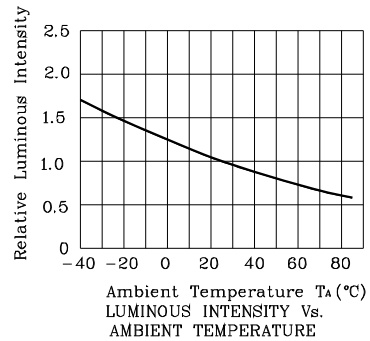
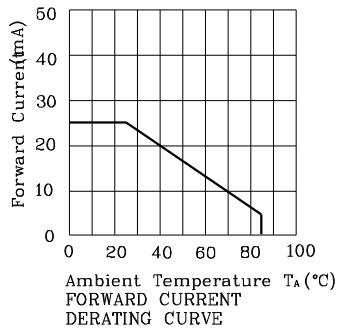
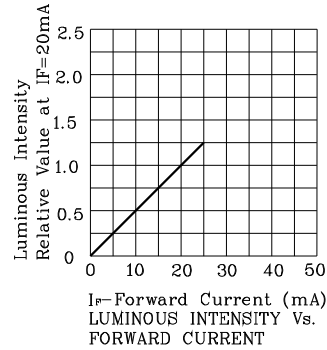
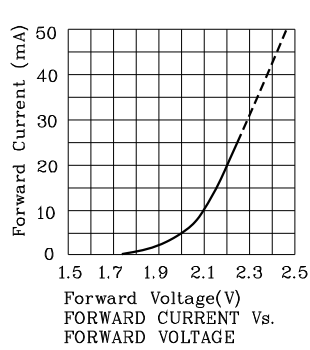
| Operating Characteristics<br>(TA=25°C)                                       |                | MG<br>(GaP) | Unit |
|--|----------------|-------------|------|
| Forward Voltage (Typ.)<br>(I <sub>F</sub> =20mA)                             | V <sub>F</sub> | 2.2         | V    |
| Forward Voltage (Max.)<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 <sub>P</sub> | 565         | nm   |
| Wavelength Of Dominant<br>Emission (Typ.)<br>(I <sub>F</sub> =20mA)          | λ <sub>D</sub> | 568         | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(I <sub>F</sub> =20mA) | Δλ             | 30          | nm   |
| Capacitance (Typ.)<br>(V <sub>F</sub> =0V, f=1MHz)                           | C              | 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>2θ 1/2 |
|--|----------------|-------------------|-------------|---|------|------------------------------------|-------------------------|
|  |                |                   |             | min.  | typ. |                                    |                         |
| XZMG55W  | Green          | GaP               | Water Clear | 4   | 14   | 565                                | 120°                    |
| Published Date : JAN 23 ,2008      Drawing No : XDSA1301      V5      Checked : B.L.LIU      P.1/4 |                |                   |             |   |      |                                    |                         |

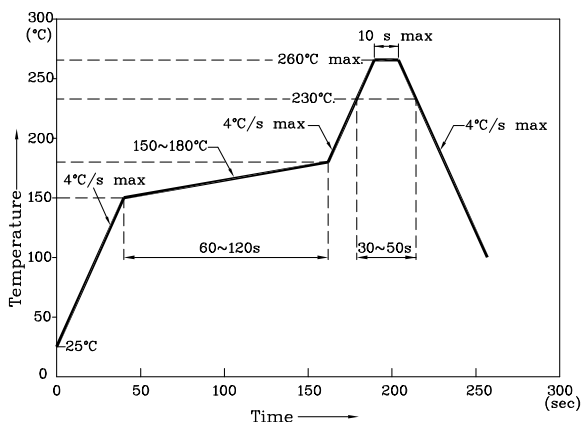


RELATIVE INTENSITY Vs. WAVELENGTH

❖ MG



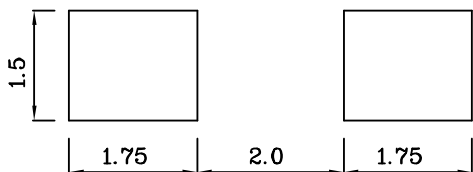
Reflow Soldering Profile For Lead-free SMT Process.



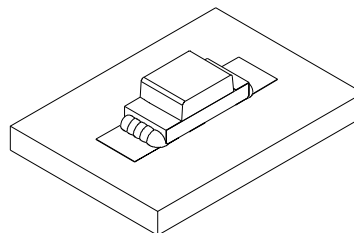
NOTES:

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.

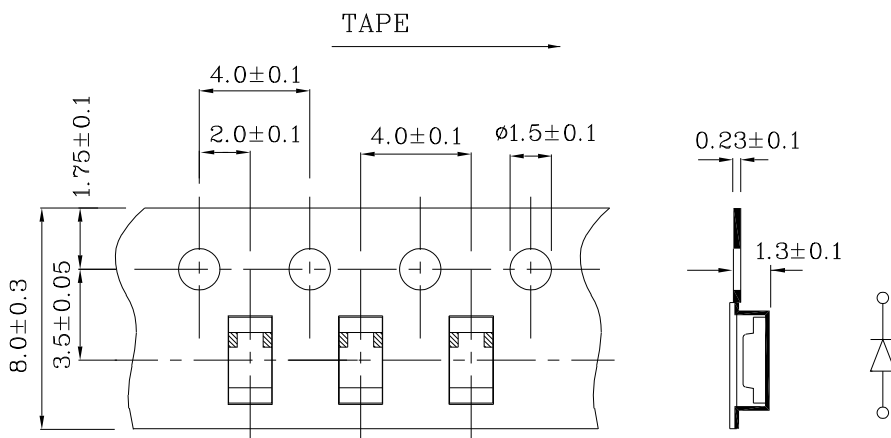
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

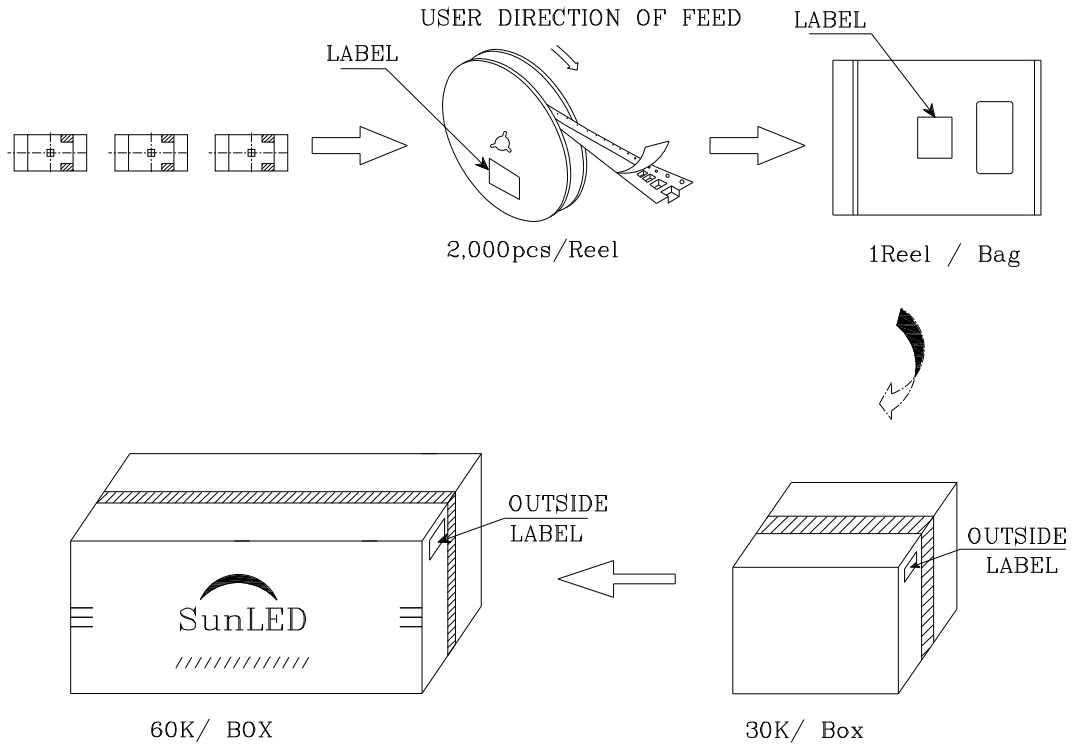

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

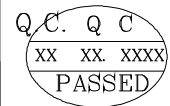

1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**XZMG55W**

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