

PRELIMINARY SPEC

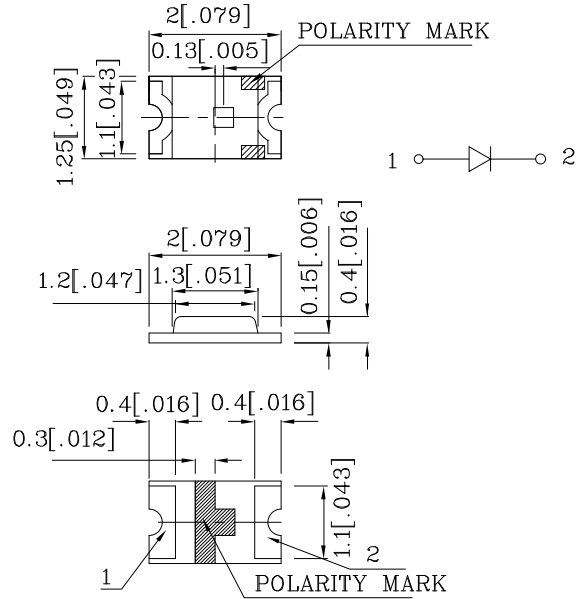
**Features**

- 2.0X1.25mm SMT LED,0.5mm MAX.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:

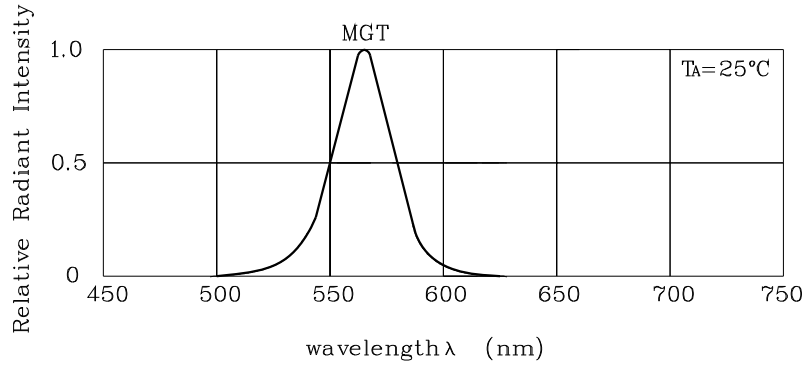
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$ " unless otherwise noted.
- 3.Specifications are subject to change without notice.



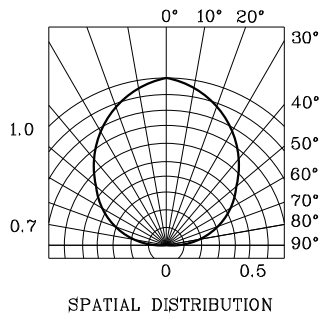
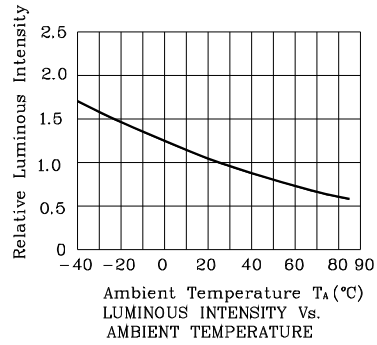
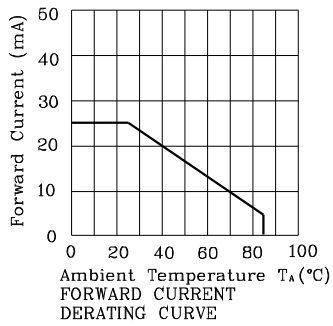
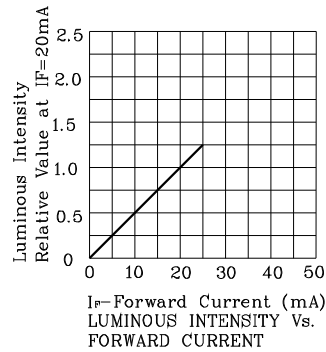
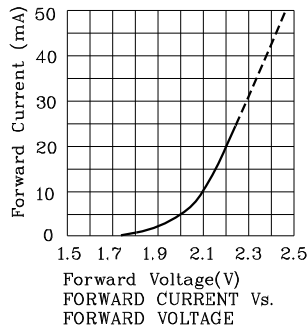
| Absolute Maximum Ratings<br>(TA=25°C)                          |                  | MGT<br>(GaP) | Unit |
|--|------------------|--------------|------|
| Reverse Voltage  | V <sub>R</sub>   | 5            | V    |
| Forward Current  | I <sub>F</sub>   | 25           | mA   |
| Forward Current (Peak)<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)                                       |                | MGT<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   |

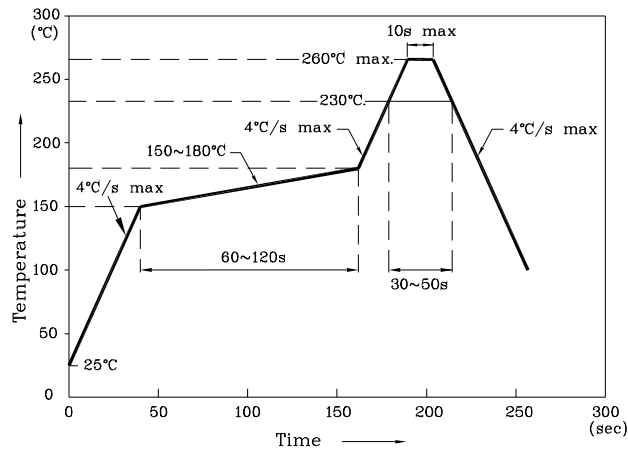
| Part Number | Emitting Color | Emitting Material | Lens-color  | Luminous Intensity<br>(I <sub>F</sub> =20mA)<br>mcd |      | Wavelength<br>nm<br>λ <sub>P</sub> | Viewing Angle<br>2 θ 1/2 |
|-------------|----------------|-------------------|-------------|---|------|------------------------------------|--------------------------|
|             |                |                   |             | min.  | typ. |                                    |                          |
| ZMGT54W-4   | Green          | GaP               | Water Clear | 10  | 24   | 565                                | 110°                     |



❖ MGT



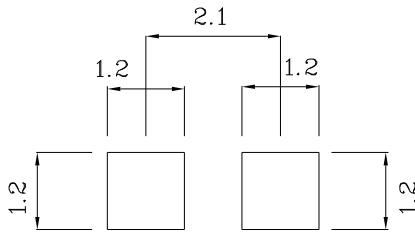
Reflow Soldering Profile For Lead-free SMT Process.



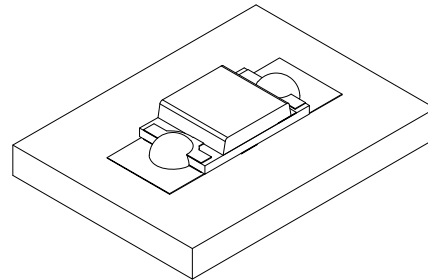
Notes:

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.

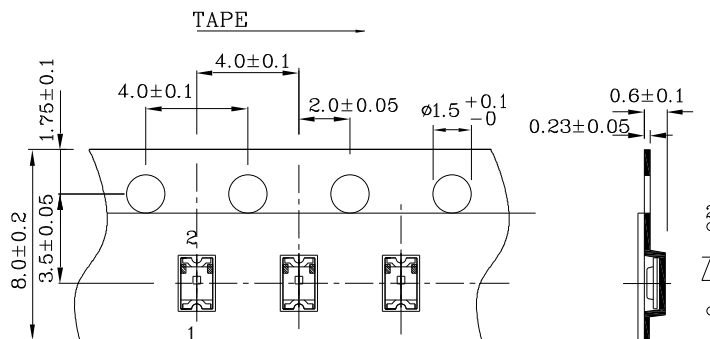
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

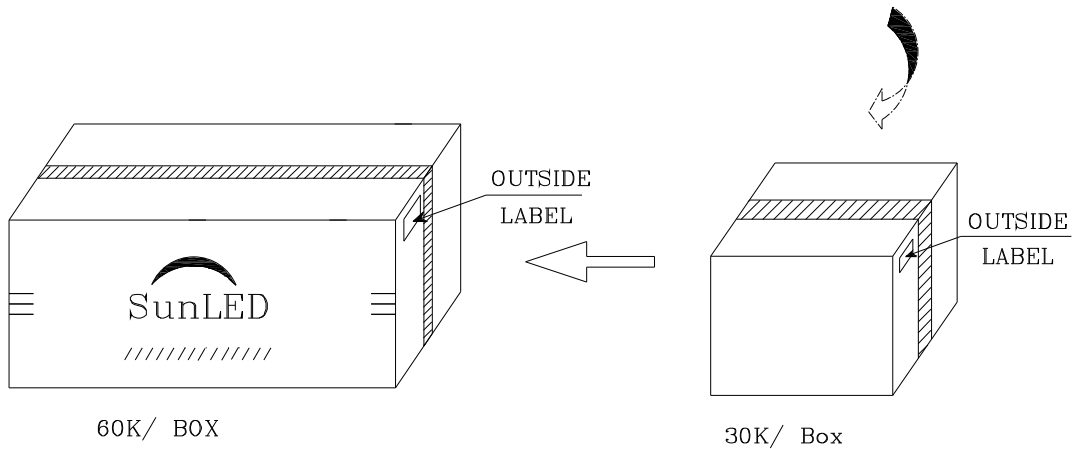
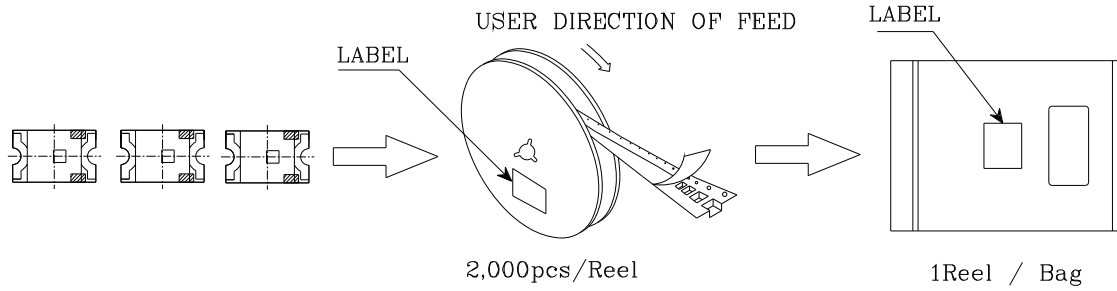
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:


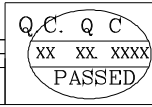

1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**ZMGT54W-4**



|  |  |  |
|--|--|--|
|                             |  |  |
| P/NO : Zxxx54x-4   |  |  |
| QTY : 2,000 pcs  |  | CODE: XXX  |
| S/N : XX   |  |  |
| LOT NO:  |  |  |
| <br>xxxxxxxxxxxxxxxxxxxxxx |  |  |
| RoHS Compliant   |  |  |