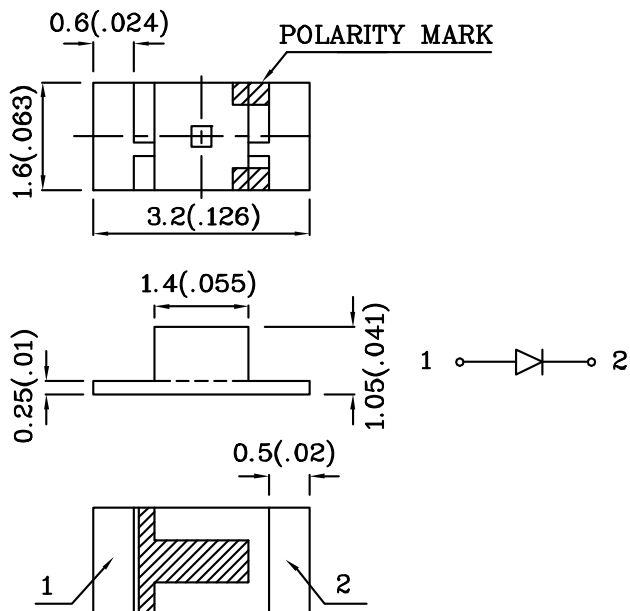


- 3.2mmx1.6mm SMT LED,1.05mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



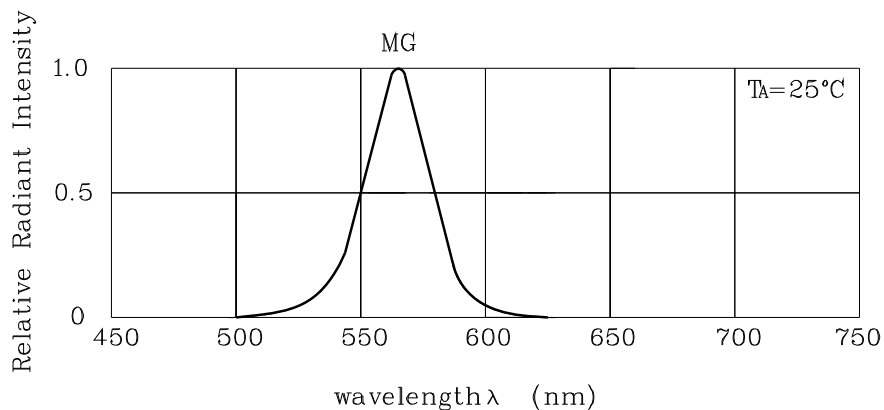
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.
3. Specifications are subject to change without notice.



| Absolute Maximum Ratings<br>(TA=25°C)                          |      | MG<br>(GaP) | Unit |
|----------------------------------------------------------------|------|-------------|------|
| Reverse Voltage                                                | VR   | 5           | V    |
| Forward Current                                                | IF   | 25          | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | iFS  | 140         | mA   |
| Power Dissipation                                              | PT   | 62.5        | mW   |
| Operating Temperature                                          | TA   | -40 ~ +85   | °C   |
| Storage Temperature                                            | Tstg | -40 ~ +85   |      |

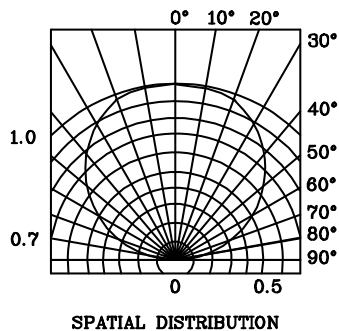
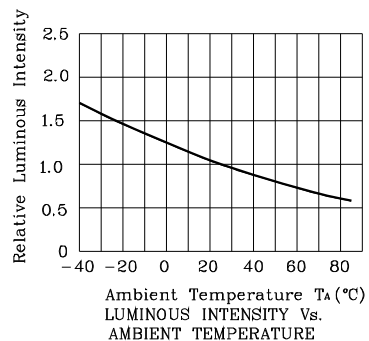
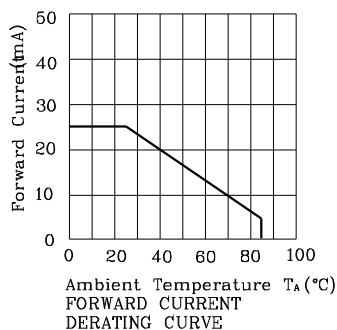
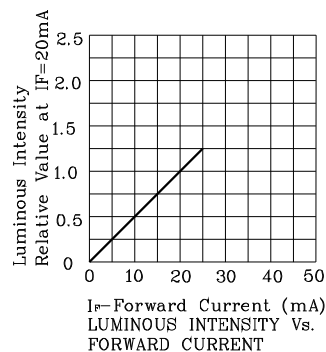
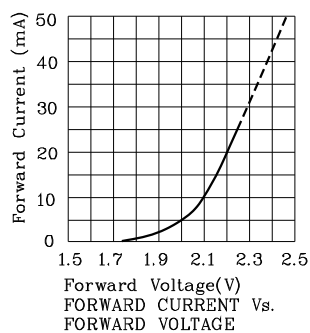
| Operating Characteristics<br>(T <sub>A</sub> =25°C)                          |                | MG<br>(GaP) | Unit |
|------------------------------------------------------------------------------|----------------|-------------|------|
| Forward Voltage (Typ.)<br>(I <sub>F</sub> =20mA)                             | 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 P            | 565         | nm   |
| Wavelength Of Dominant<br>Emission (Typ.)<br>(I <sub>F</sub> =20mA)          | λ D            | 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 (IF=20mA)<br>mcd | Wavelength<br>nm<br>λ P | Viewing Angle<br>2 θ 1/2 |
|-------------------------------|----------------|-----------------------|-------------|-------------------------------------|-------------------------|--------------------------|
|                               |                |                       |             | min.                                | typ.                    |                          |
| ZMG55W-2                      | Green          | GaP                   | Water Clear | 4                                   | 14                      | 565 120°                 |
|                               |                |                       |             |                                     |                         |                          |
|                               |                |                       |             |                                     |                         |                          |
| Published Date : FEB 23, 2008 |                | Drawing No : SDSA0214 |             | V8                                  | Checked : B.L.LIU P.1/4 |                          |

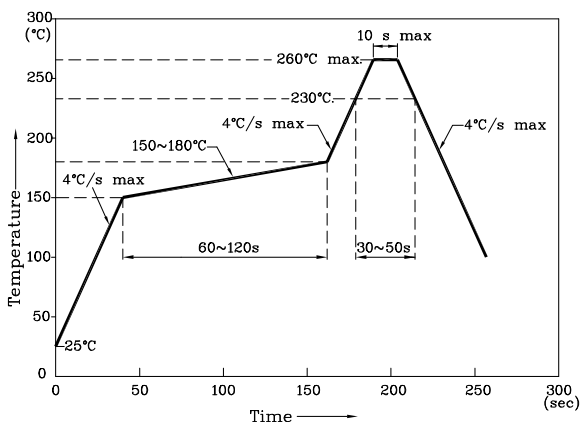


RELATIVE INTENSITY Vs. WAVELENGTH

❖ MG



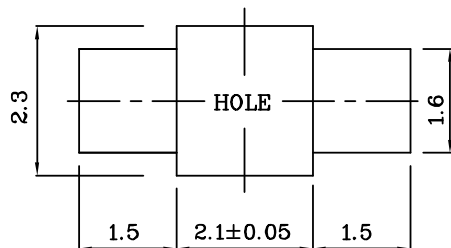
Reflow Soldering Profile For Lead-free SMT Process.



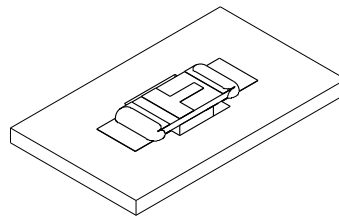
NOTES:

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.

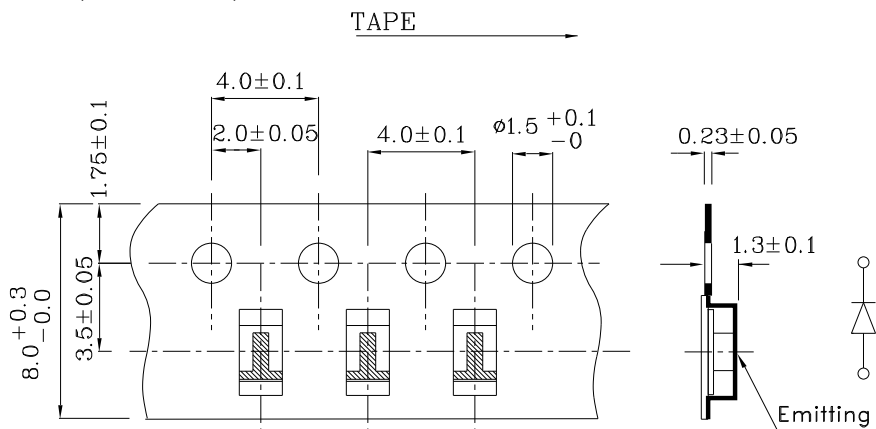
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance:± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

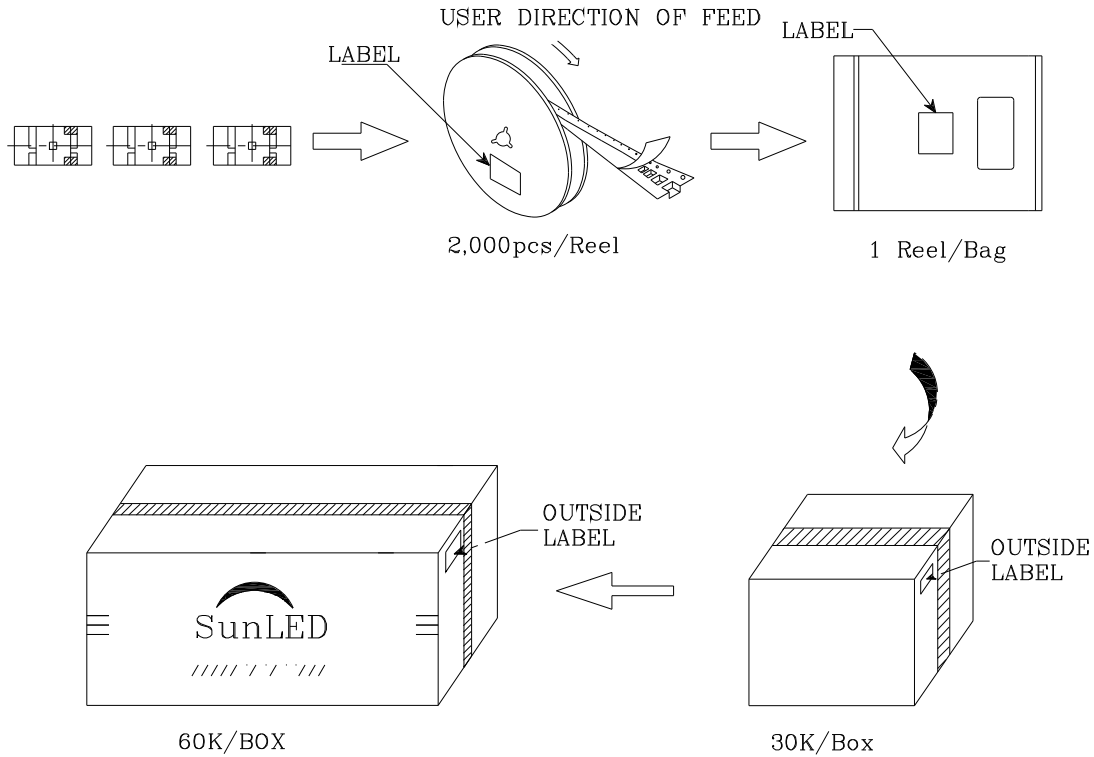
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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**

**ZMG55W-2**



**SunLED**

Q.C. Q C

XX XX XXXX

PASSED

P/NO : Zxxx55x-2

QTY : 2,000 pcs CODE: XXX

S/N : XX

LOT NO :

XXXXXXXXXXXXXXXXXXXXXXX

RoHS Compliant