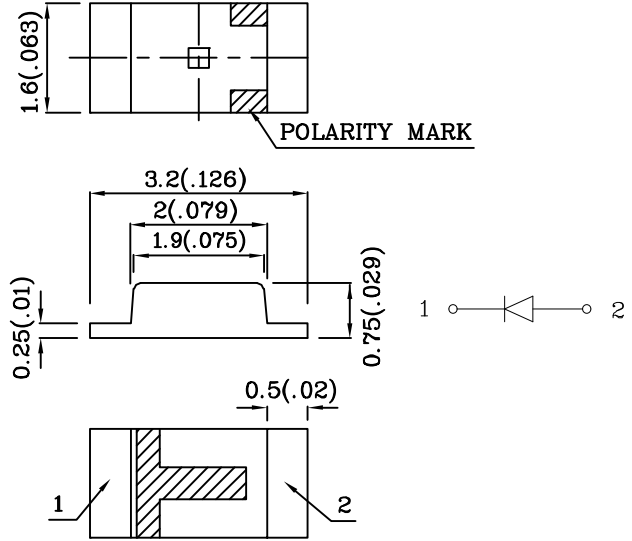


PRELIMINARY SPEC

**Features**

- 3.2mmx1.6mm SMT LED, 0.75mm 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.



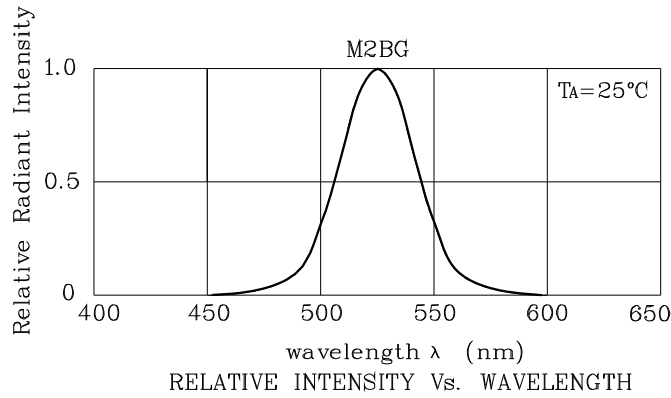
Notes:

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.

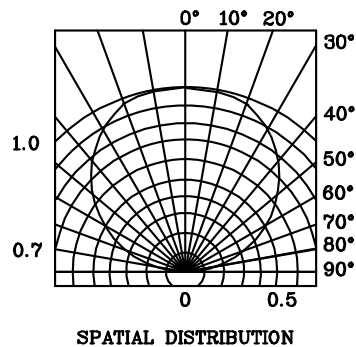
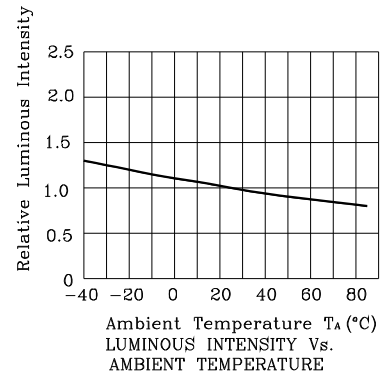
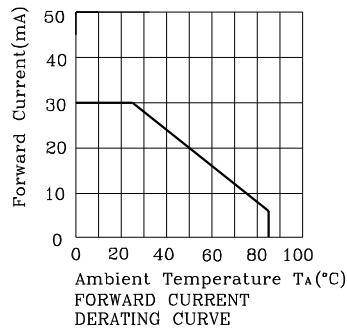
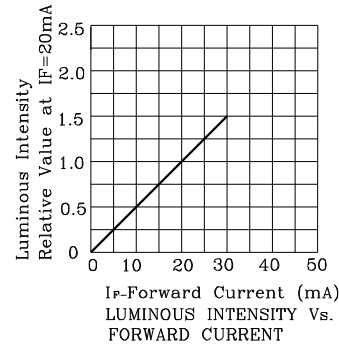
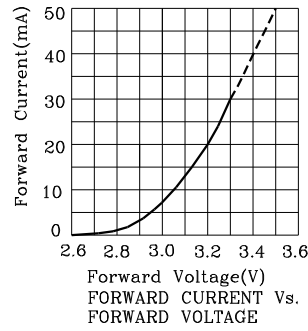
| Absolute Maximum Ratings<br>(TA=25°C)                          |      | M2BG<br>(InGaN) | Unit |
|--|------|-----------------|------|
| Reverse Voltage  | VR   | 5               | V    |
| Forward Current  | IF   | 30              | mA   |
| Forward Current (peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | iFS  | 100             | mA   |
| Power Dissipation  | PT   | 111             | mW   |
| Operating Temperature  | TA   | -40 ~ +85       | °C   |
| Storage Temperature  | Tstg | -40 ~ +85       |      |
| Electrostatic Discharge Threshold<br>(HBM)                     |      | 1000            | V    |

| Operating Characteristics<br>(TA=25°C)                          |                 | M2BG<br>(InGaN) | Unit |
|---|-----------------|-----------------|------|
| Forward Voltage (Typ.)<br>(IF=20mA)                             | VF              | 3.2             | V    |
| Forward Voltage (Max.)<br>(IF=20mA)                             | VF              | 3.7             | V    |
| Reverse Current (Max.)<br>(VR=5V)                               | IR              | 10              | uA   |
| Wavelength Of Peak<br>Emission (Typ.)<br>(IF=20mA)              | $\lambda P$     | 525             | nm   |
| Wavelength Of Dominant<br>Emission (Typ.)<br>(IF=20mA)          | $\lambda D$     | 535             | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(IF=20mA) | $\Delta\lambda$ | 39              | nm   |
| Capacitance (Typ.)<br>(VF=0V, f=1MHz)                           | C               | 65              | pF   |

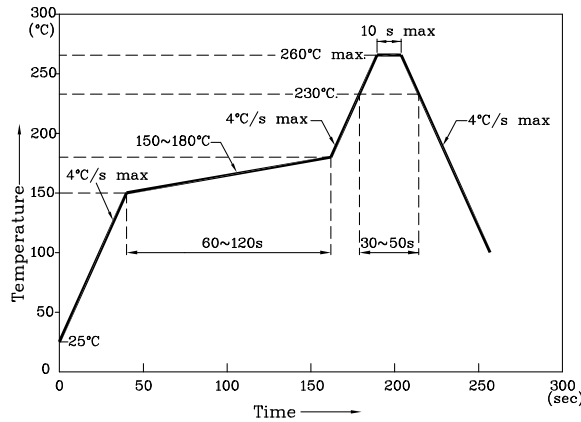
| Part Number | Emitting Color | Emitting Material | Lens-color  | Luminous Intensity<br>(IF=20mA) |      | Wavelength<br>nm<br>$\lambda P$ | Viewing Angle<br>2 $\theta$ 1/2 |
|-------------|----------------|-------------------|-------------|---------------------------------|------|---------------------------------|---------------------------------|
|             |                |                   |             | min.                            | typ. |                                 |                                 |
| XZM2BG55W-1 | Green          | InGaN             | Water Clear | 380                             | 795  | 525                             | 120°                            |



❖ M2BG



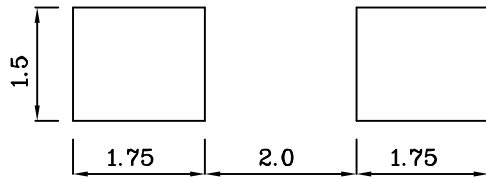
Reflow Soldering Profile For Lead-free SMT Process.



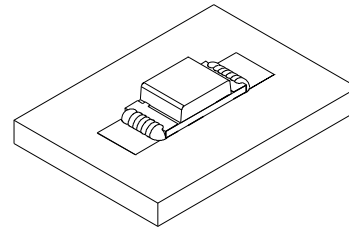
NOTES:

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.

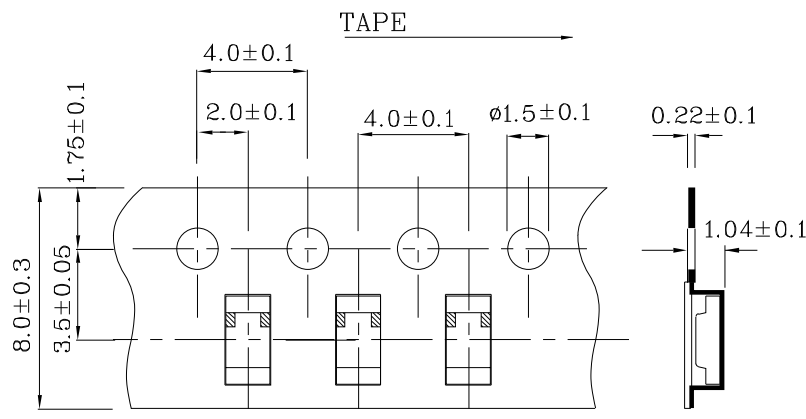
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

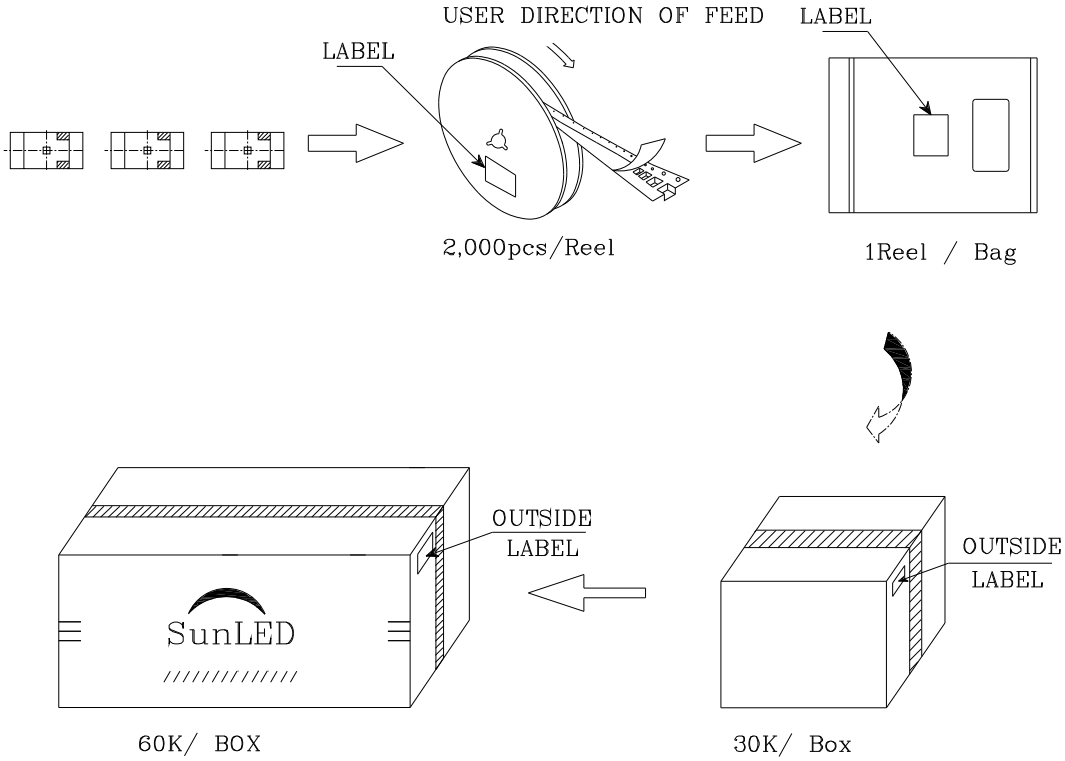

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

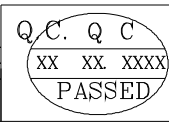

1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**XZM2BG55W-1**

|  |           |
|--|-----------|
|                              |           |
| P/NO : XZxxx55x-1  |           |
| QTY : 2,000 pcs  | CODE: XXX |
| S/N : XX   |           |
| LOT NO:  |           |
| <br>xxxxxxxxxxxxxxxxxxxxxxxx |           |
| RoHS Compliant   |           |