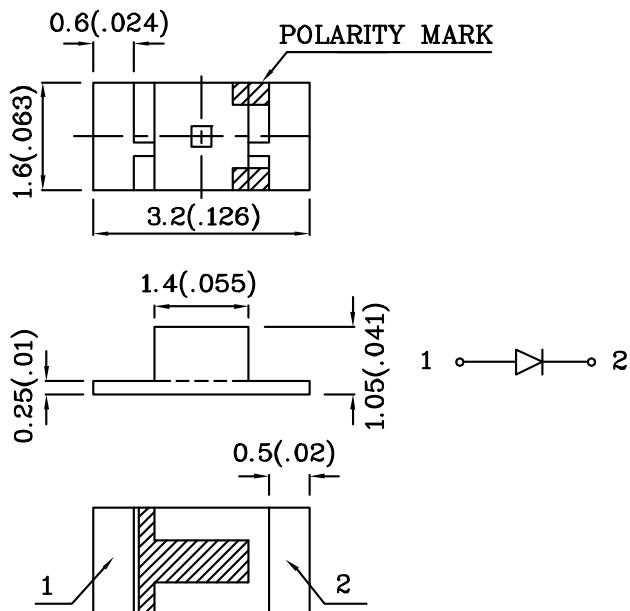


- 3.2mmx1.6mm SMT LED,1.05mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



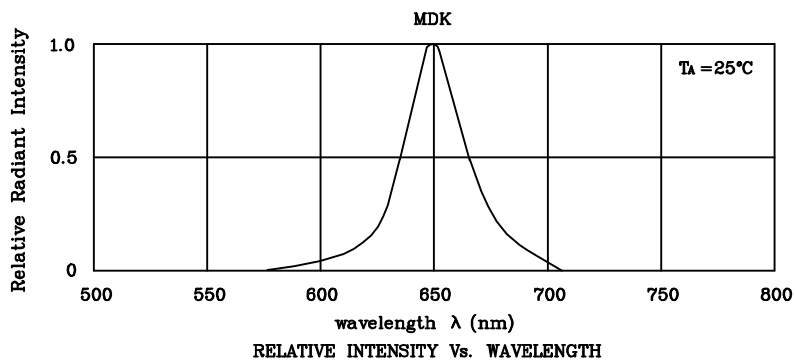
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.
3. Specifications are subject to change without notice.



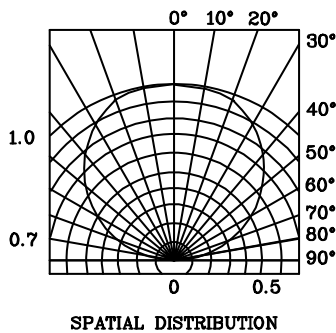
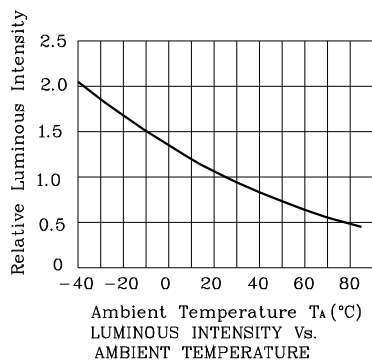
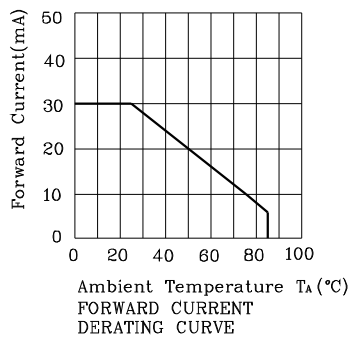
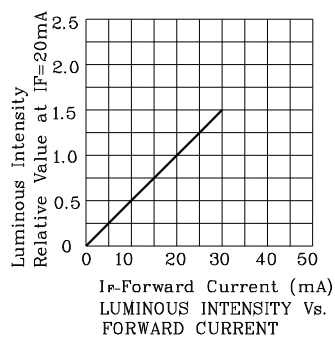
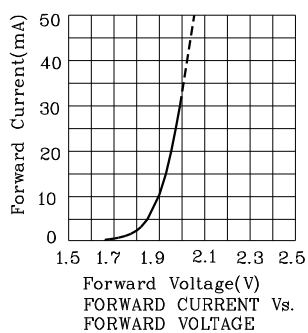
| Absolute Maximum Ratings<br>(TA=25°C)                          |      | MDK<br>(InGaAlP) | Unit |
|----------------------------------------------------------------|------|------------------|------|
| Reverse Voltage                                                | VR   | 5                | V    |
| Forward Current                                                | IF   | 30               | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | iFS  | 185              | mA   |
| Power Dissipation                                              | PT   | 75               | mW   |
| Operating Temperature                                          | TA   | -40 ~ +85        | °C   |
| Storage Temperature                                            | Tstg | -40 ~ +85        |      |

| Operating Characteristics<br>(TA=25°C)                       |                | MDK<br>(InGaAlP) | Unit |
|--------------------------------------------------------------|----------------|------------------|------|
| Forward Voltage (Typ.)<br>(IF=20mA)                          | V <sub>F</sub> | 1.95             | V    |
| Forward Voltage (Max.)<br>(IF=20mA)                          | V <sub>F</sub> | 2.5              | V    |
| Reverse Current (Max.)<br>(V <sub>R</sub> =5V)               | I <sub>R</sub> | 10               | μA   |
| Wavelength of Peak Emission (Typ.)<br>(IF=20mA)              | λ P            | 650              | nm   |
| Wavelength of Dominant Emission (Typ.)<br>(IF=20mA)          | λ D            | 635              | nm   |
| Spectral Line Full Width At Half-Maximum (Typ.)<br>(IF=20mA) | Δλ             | 28               | nm   |
| Capacitance (Typ.)<br>(V <sub>F</sub> =0V, f=1MHz)           | C              | 35               | pF   |

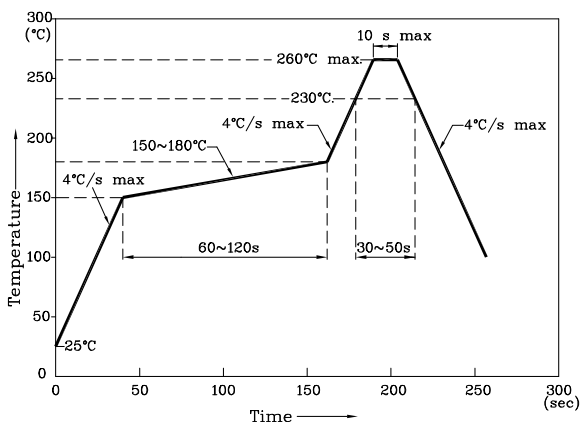
| Part Number                   | Emitting Color | Emitting Material     | Lens-color  | Luminous Intensity (IF=20mA)<br>mcd | Wavelength<br>nm<br>λ P | Viewing Angle<br>2 θ 1/2 |
|-------------------------------|----------------|-----------------------|-------------|-------------------------------------|-------------------------|--------------------------|
|                               |                |                       |             | min.                                | typ.                    |                          |
| ZMDK55W-2                     | Red            | InGaAlP               | Water Clear | 50                                  | 148                     | 650 120°                 |
|                               |                |                       |             |                                     |                         |                          |
|                               |                |                       |             |                                     |                         |                          |
| Published Date : FEB 23, 2008 |                | Drawing No : SDSA2488 |             | V5                                  | Checked : B.L.LIU       | P.1/4                    |



❖ **MDK**



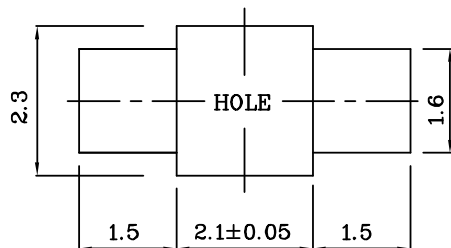
Reflow Soldering Profile For Lead-free SMT Process.



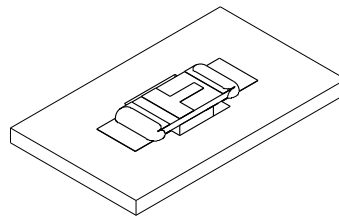
NOTES:

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.

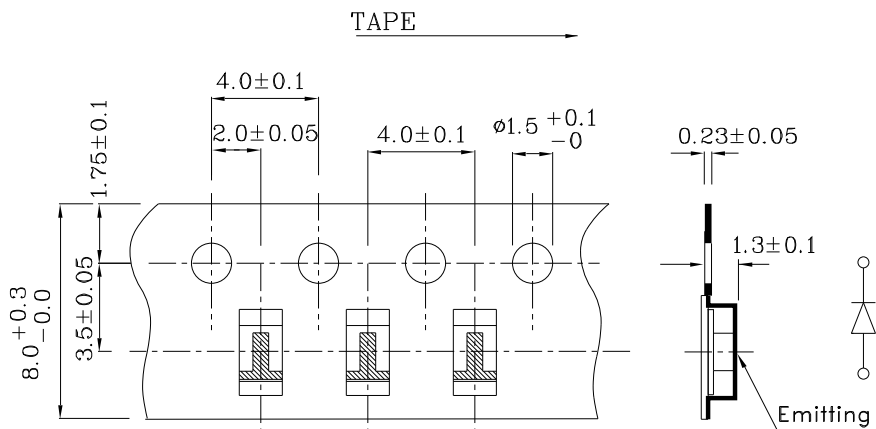
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance:± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

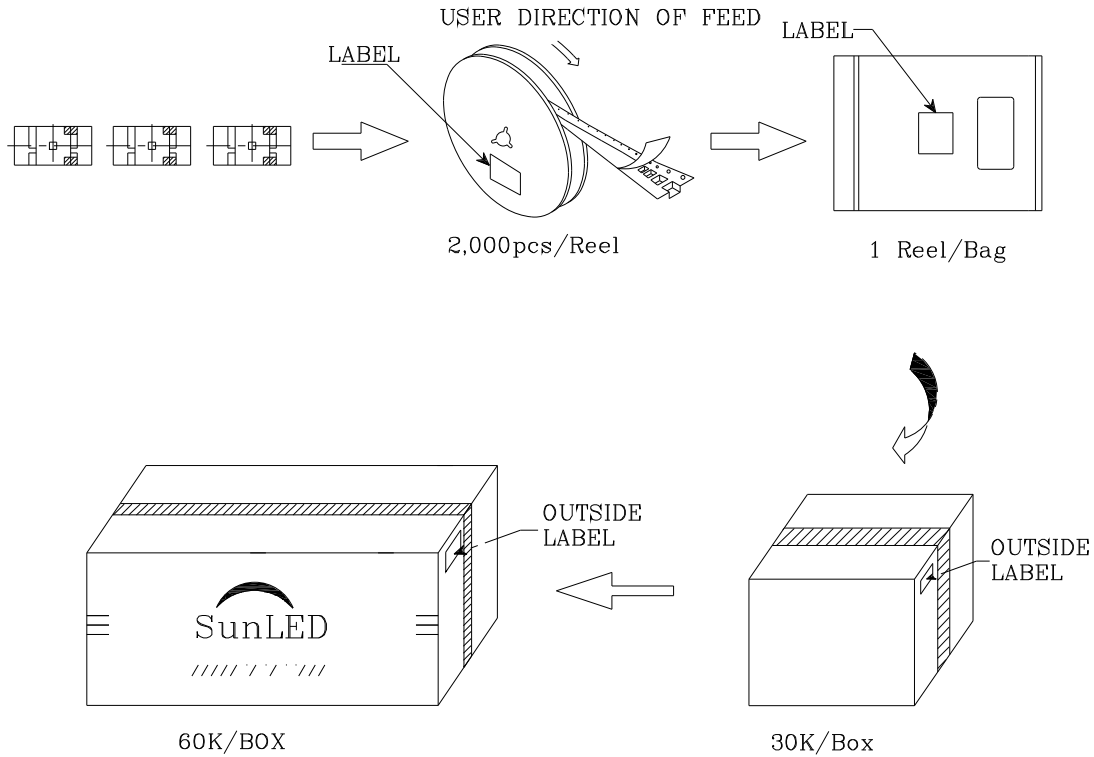
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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**

**ZMDK55W-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 :                    |           |
| <br>XXXXXXXXXXXXXXXXXXXXXXX |           |
| RoHS Compliant              |           |