

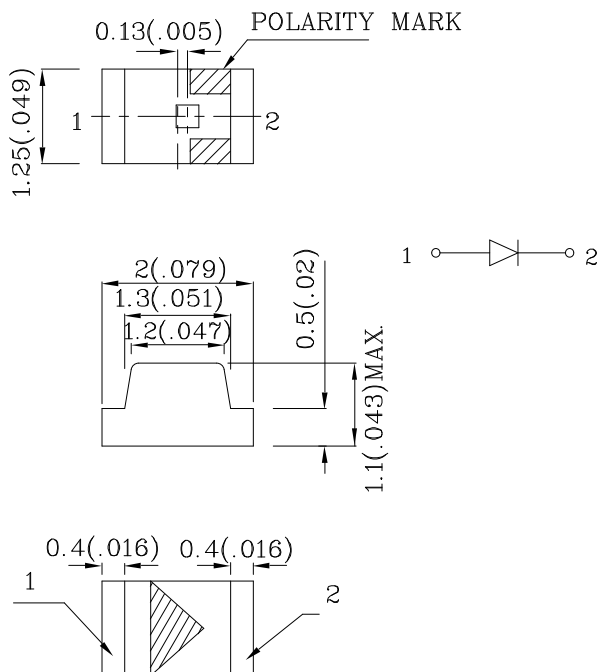
Features

- 2.0mmx1.25mm 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:

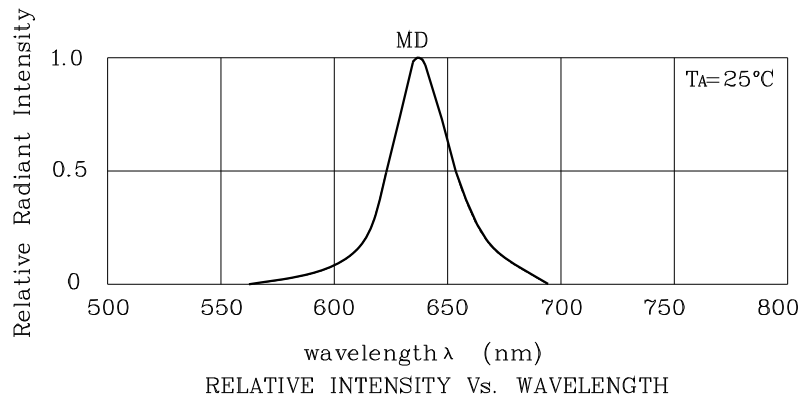
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ unless otherwise noted.
3. Specifications are subject to change without notice.



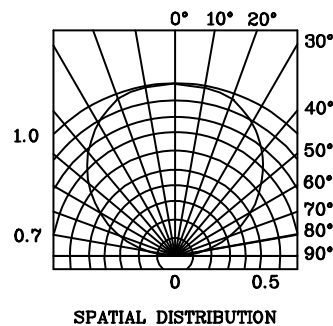
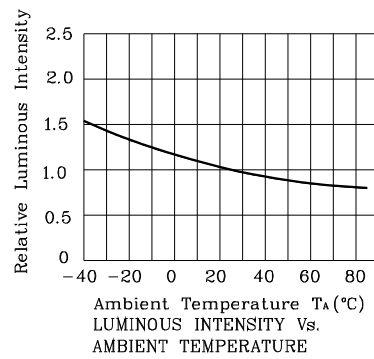
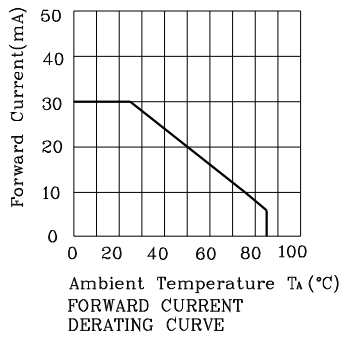
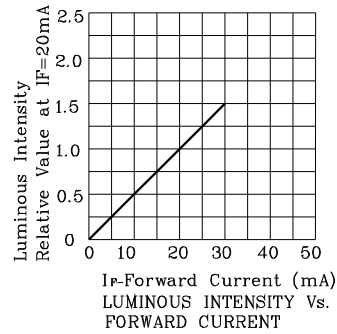
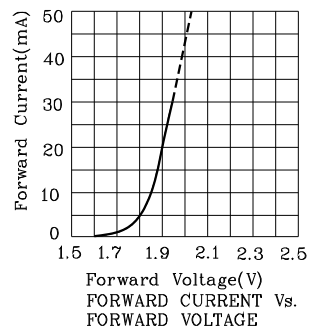
| Absolute Maximum Ratings (TA=25°C) | | MD (InGaAlP) | Unit |
|--|------------------|-----------------|------|
| Reverse Voltage | V _R | 5 | V |
| Forward Current | I _F | 30 | mA |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | i _{FS} | 185 | mA |
| Power Dissipation | P _T | 75 | mW |
| Operating Temperature | T _A | -40 ~ +85 | °C |
| Storage Temperature | T _{stg} | -40 ~ +85 | |

| Operating Characteristics (TA=25°C) | | MD (InGaAlP) | Unit |
|--|----------------|-----------------|------|
| Forward Voltage (Typ.) (I _F =20mA) | V _F | 1.9 | V |
| Forward Voltage (Max.) (I _F =20mA) | V _F | 2.5 | V |
| Reverse Current (Max.) (V _R =5V) | I _R | 10 | uA |
| Wavelength of Peak Emission (Typ.) (I _F =20mA) | λ _P | 640 | nm |
| Wavelength of Dominant Emission (Typ.) (I _F =20mA) | λ _D | 628 | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA) | Δλ | 27 | nm |
| Capacitance (Typ.) (V _F =0V, f=1MHz) | C | 45 | pF |

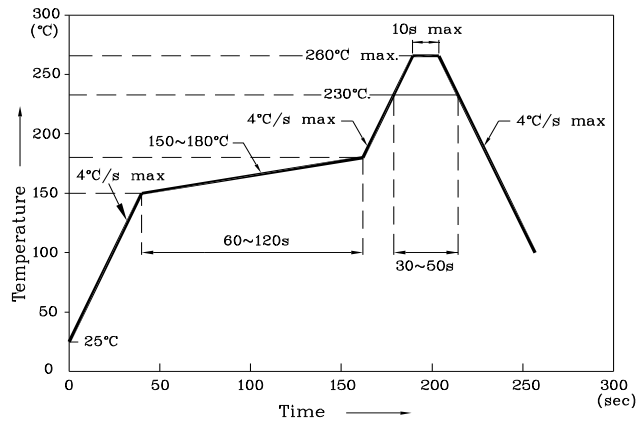
| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity (I _F =20mA) med | | Wavelength nm λ _P | Viewing Angle 2 θ 1/2 |
|---|----------------|-------------------|-------------|---|------|------------------------------------|--------------------------|
| | | | | min. | typ. | | |
| ZMD54W | Red | InGaAlP | Water Clear | 70 | 198 | 640 | 120° |
| Published Date : FEB 25,2008 Drawing No : SDSA0267 V6 Checked : B.L.LIU P.1/4 | | | | | | | |



❖ MD



Reflow Soldering Profile For Lead-free SMT Process.

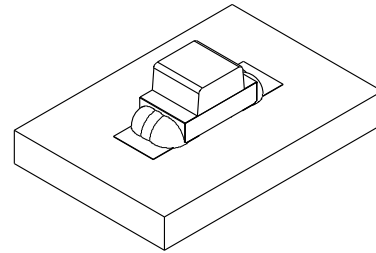
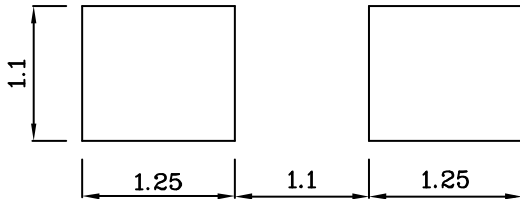


Notes:

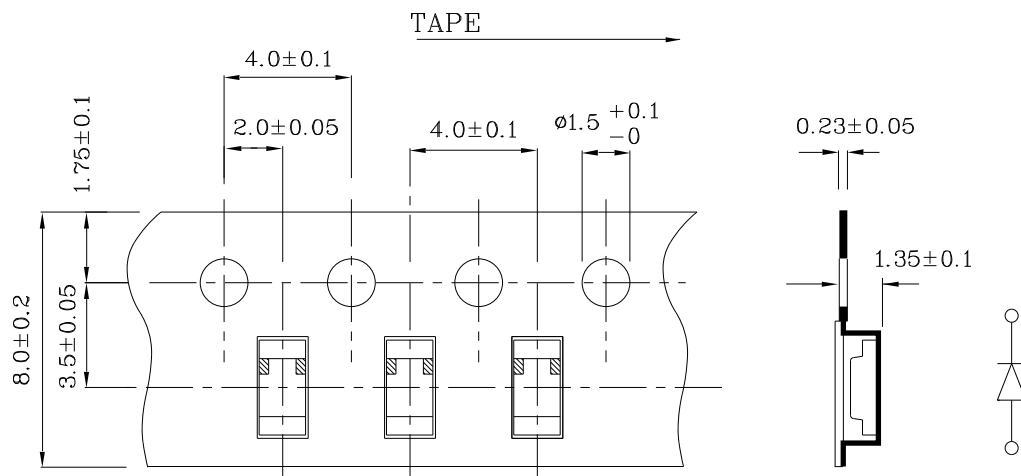
1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

❖ 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:

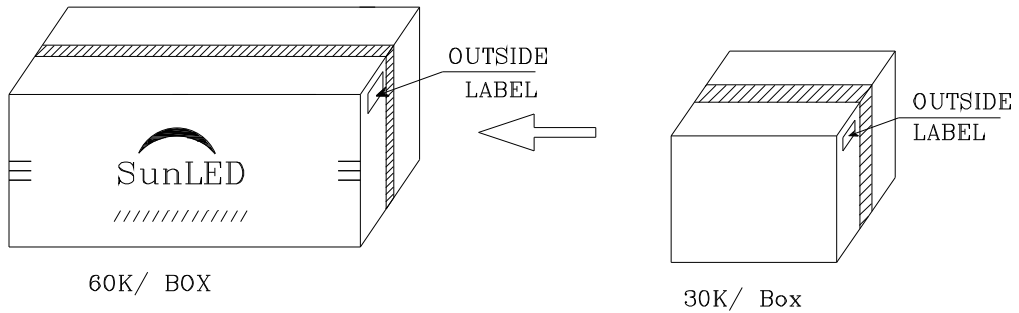
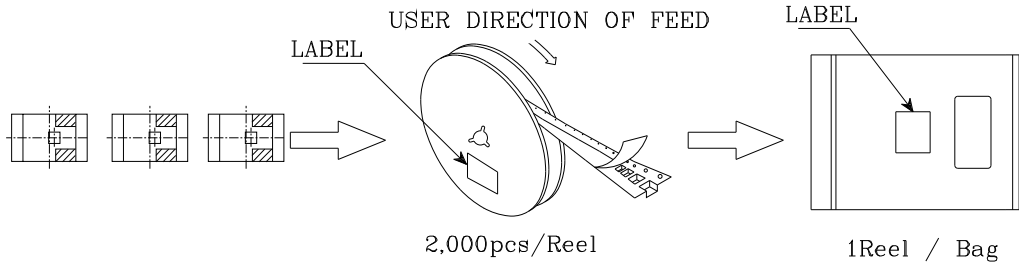

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

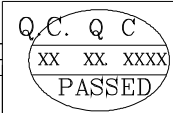

1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

ZMD54W

| | |
|--|-----------|
|  | |
| P/N0 : Zxxx54x | |
| QTY : 2,000 pcs | CODE: XXX |
| S/N : XX | |
| LOT NO: | |
|  xxxxxxxxxxxxxxxxxxxxxxxx | |
| RoHS Compliant | |