

PRELIMINARY SPEC

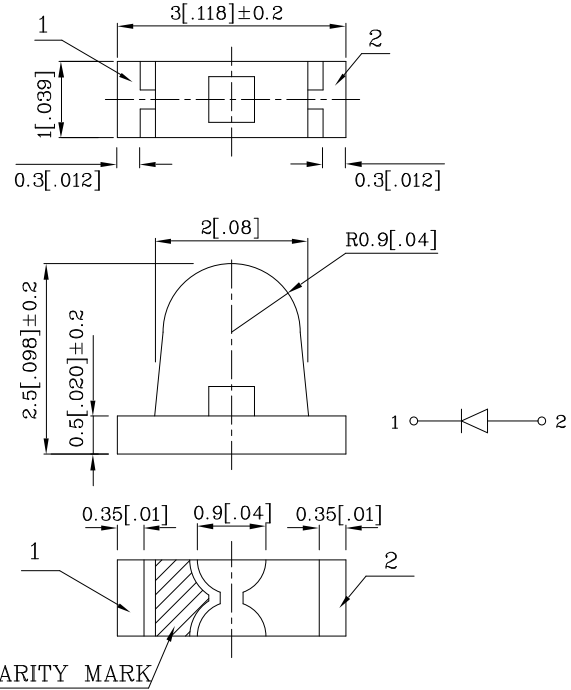
Features

- 3.0mm x 1.0mm RIGHT ANGLE SMT LED, 2.5mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACK LIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



Notes:

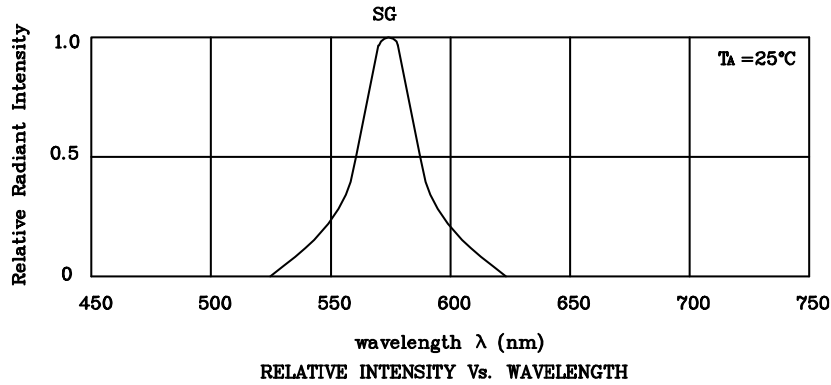
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.15(0.006")$ unless otherwise noted.
3. Specifications are subject to change without notice.



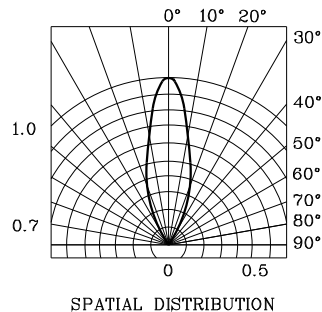
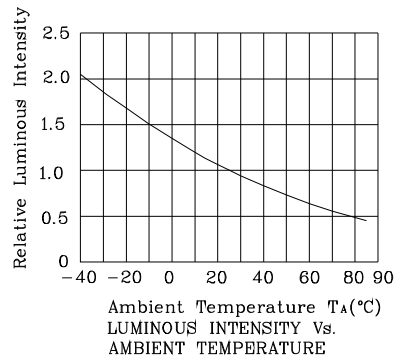
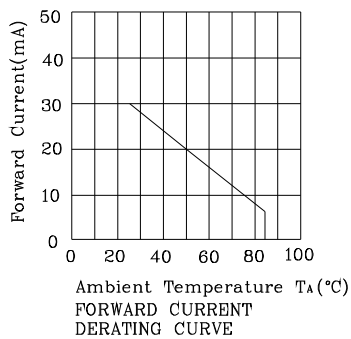
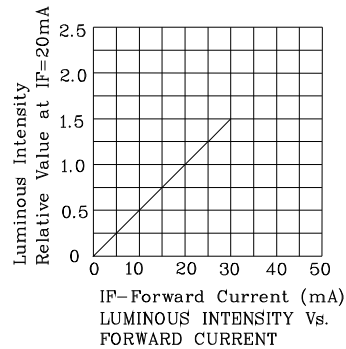
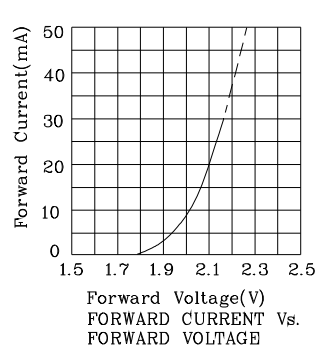
| Absolute Maximum Ratings ($T_A=25^\circ\text{C}$) | | SG (InGaAlP) | Unit |
|--|-----------|-----------------|------|
| Reverse Voltage | V_R | 5 | V |
| Forward Current | I_F | 30 | mA |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | i_{FS} | 150 | mA |
| Power Dissipation | P_T | 75 | mW |
| Operating Temperature | T_A | -40 ~ +85 | °C |
| Storage Temperature | T_{stg} | -40 ~ +85 | |

| Operating Characteristics ($T_A=25^\circ\text{C}$) | | SG (InGaAlP) | Unit |
|---|-----------------|-----------------|------|
| Forward Voltage (Typ.) ($I_F=20\text{mA}$) | V_F | 2.1 | V |
| Forward Voltage (Max.) ($I_F=20\text{mA}$) | V_F | 2.5 | V |
| Reverse Current (Max.) ($V_R=5\text{V}$) | I_R | 10 | uA |
| Wavelength of Peak Emission (Typ.) ($I_F=20\text{mA}$) | λ_P | 574 | nm |
| Wavelength of Dominant Emission (Typ.) ($I_F=20\text{mA}$) | λ_D | 568 | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=20\text{mA}$) | $\Delta\lambda$ | 26 | nm |
| Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$) | C | 20 | pF |

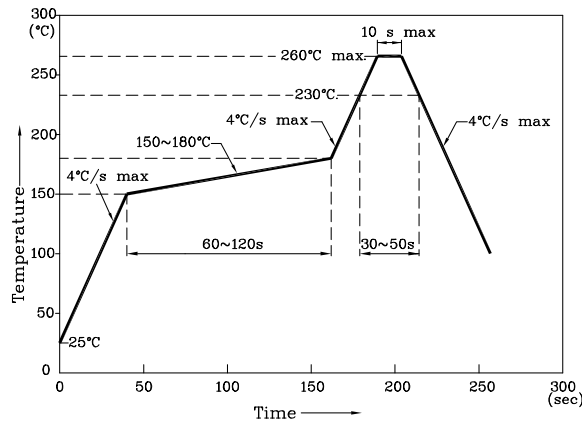
| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity ($I_F=20\text{mA}$) mcd | | Wavelength nm λ_P | Viewing Angle $2\theta_{1/2}$ |
|--|----------------|-------------------|-------------|--|------|---------------------------------|----------------------------------|
| | | | | min. | typ. | | |
| XZSG56W-1 | Green | InGaAlP | Water Clear | 36 | 89 | 574 | 30° |
| Published Date : JAN 23,2008 Drawing No :XDSB1821 V1 Checked : B.L.LIU P.1/4 | | | | | | | |



❖ SG



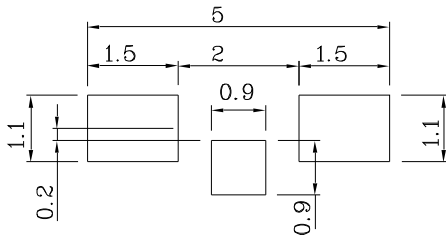
Reflow Soldering Profile For Lead-free SMT Process.



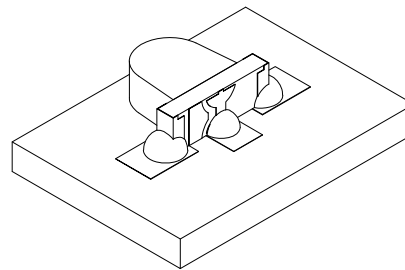
NOTES:

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.

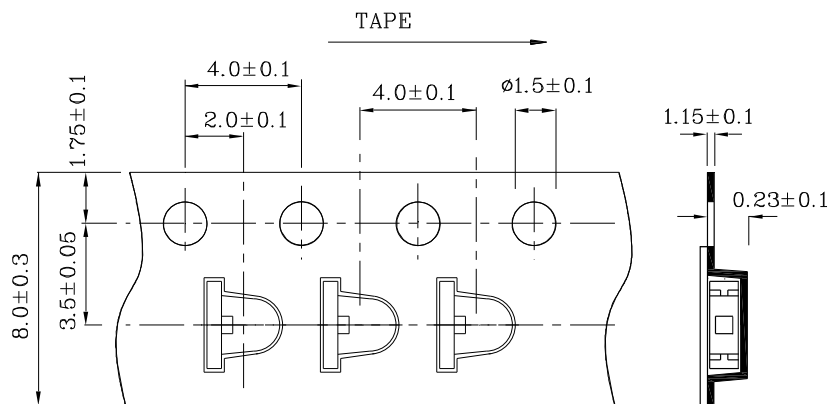
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ±0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

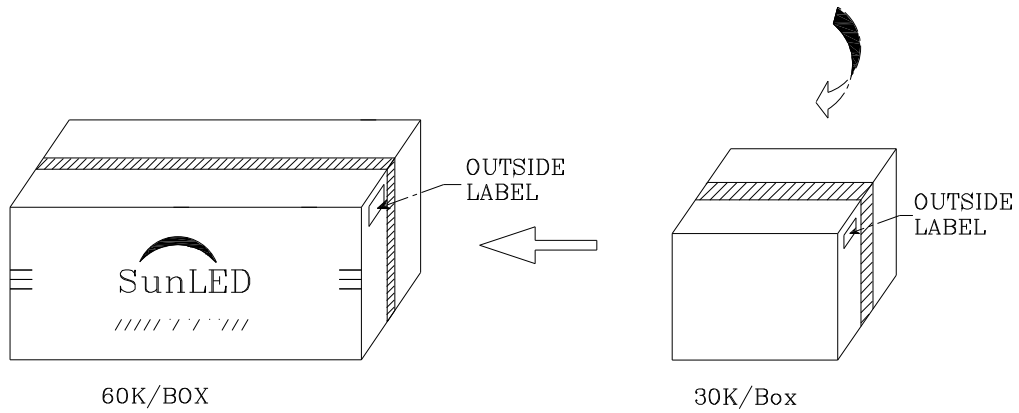
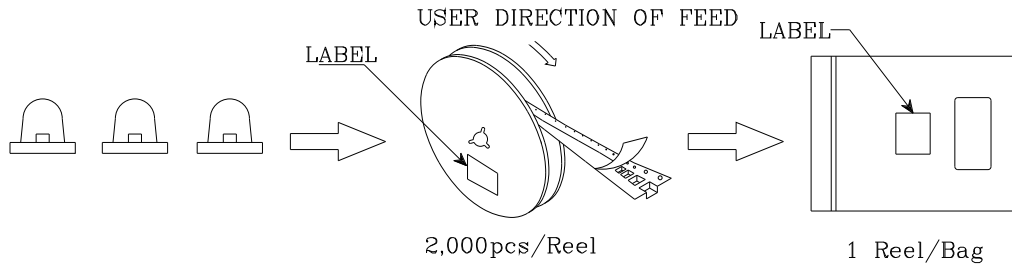
If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux or wavelength), the typical accuracy of the sorting process is as follows:


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

XZSG56W-1



| | |
|--|-----------|
| P/NO : XZxx56x-1 | |
| QTY : 2,000 pcs | CODE: XXX |
| S/N : XX | |
| LOT NO : | |
|  XXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| RoHS Compliant | |