

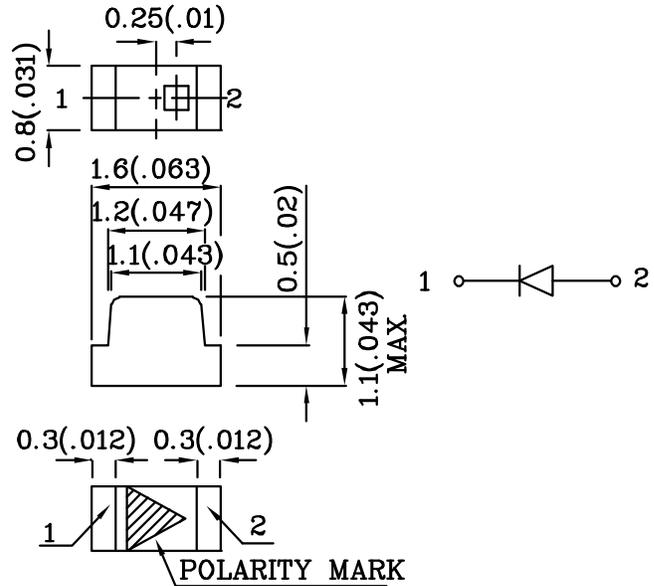
Features

- 1.6mmX0.8mm SMT LED, 1.1mm THICKNESS.
- MECHANICALLY AND SPECTRALLY MATCHED TO THE PHOTOTRANSISTOR.
- WATER CLEAR LENS.
- PACKAGE: 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



Notes:

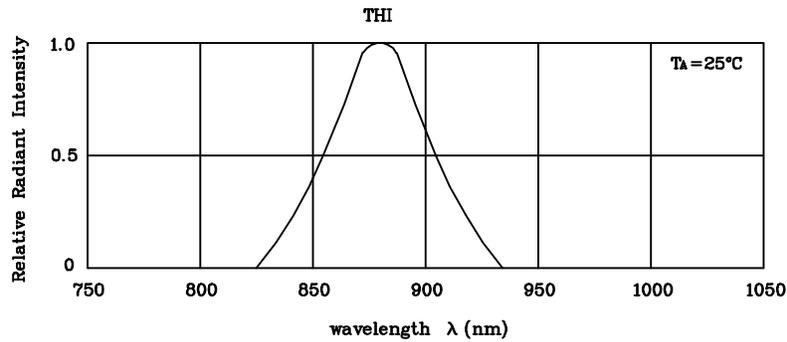
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ " unless otherwise noted.
3. Specifications are subject to change without notice.



| Absolute Maximum Ratings (TA=25°C) | | THI (GaAlAs) | Unit |
|--|------|-----------------|------|
| Reverse Voltage | VR | 5 | V |
| Forward Current | IF | 50 | mA |
| Forward Current (Peak) 1/100 Duty Cycle 10us Pulse Width | iFS | 1.2 | A |
| Power Dissipation | PT | 80 | mW |
| Operating Temperature | TA | -40 ~ +85 | °C |
| Storage Temperature | Tstg | -40 ~ +85 | |

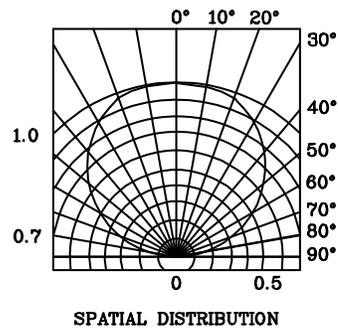
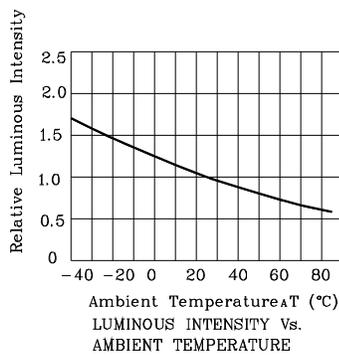
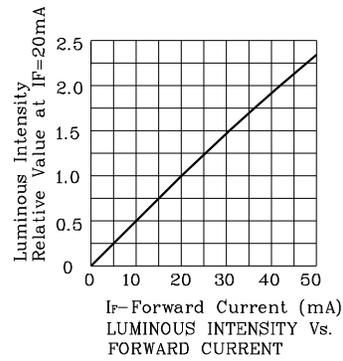
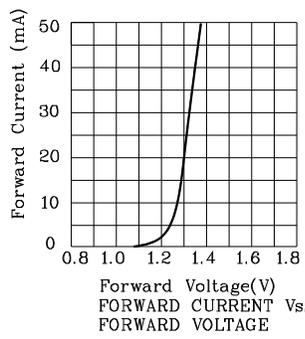
| Operating Characteristics (TA=25°C) | | THI (GaAlAs) | Unit |
|---|-----------------|-----------------|------|
| Forward Voltage (Typ.) (IF=20mA) | VF | 1.3 | V |
| Forward Voltage (Max.) (IF=20mA) | VF | 1.6 | V |
| Reverse Current (Max.) (VR=5V) | IR | 10 | uA |
| Wavelength of Peak Emission (Typ.) (IF=20mA) | λP | 880 | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA) | $\Delta\lambda$ | 50 | nm |
| Capacitance (Typ.) (VF=0V, f=1MHz) | C | 90 | pF |

| Part Number | Emitting Color | Emitting Material | Luminous Intensity (Po=Mw/sr) @20mA | | Wavelength nm λP | Viewing Angle 2 θ 1/2 |
|---|----------------|-------------------|---|------|---------------------------------|---------------------------------|
| | | | min. | typ. | | |
| XZTHI53W | GaAlAs | Water Clear | 0.4 | 0.8 | 880 | 120° |
| Published Date : JAN 25,2008 Drawing No : XDSA1793 V5 Checked : B.L.LIU P.1/4 | | | | | | |

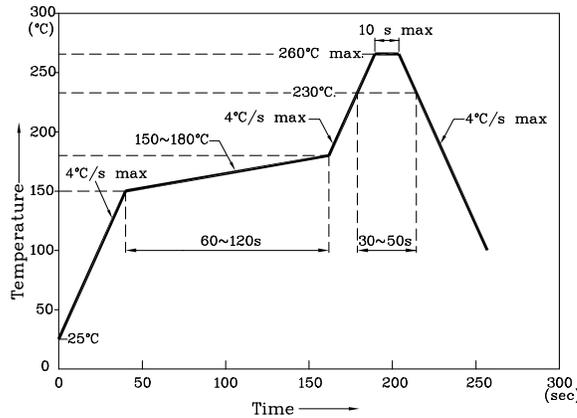


RELATIVE INTENSITY Vs. WAVELENGTH

❖ THI



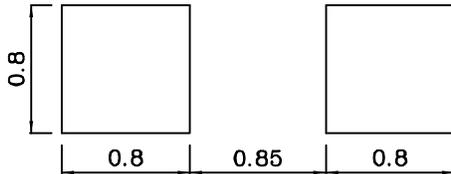
Reflow Soldering Profile For Lead-free SMT Process.



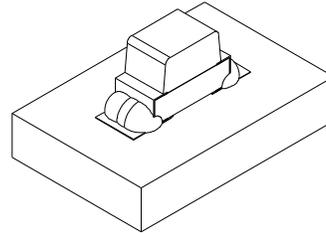
NOTES:

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.

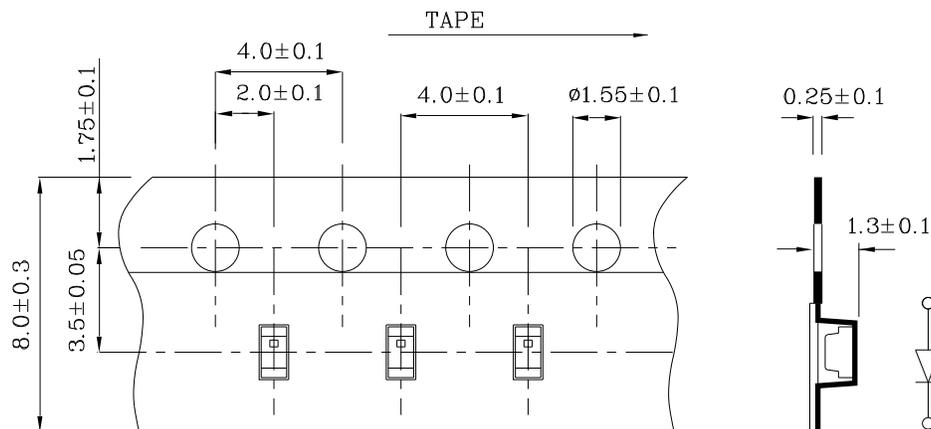
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

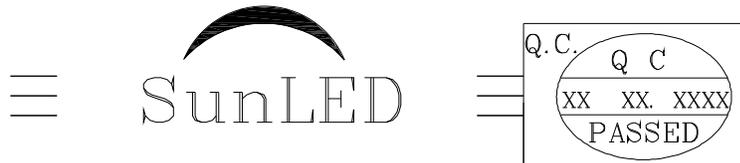
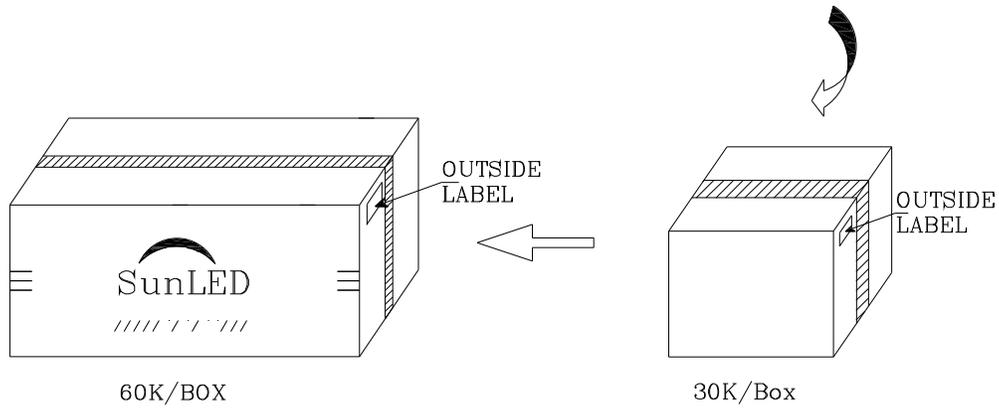
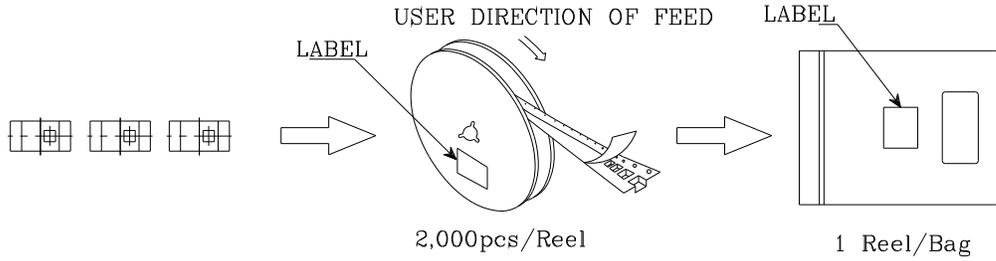
If special sorting is required (e.g. binning based on forward voltage or radiant intensity / luminous flux), the typical accuracy of the sorting process is as follows:

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

Note: Accuracy may depend on the sorting parameters

PACKING & LABEL SPECIFICATIONS

XZTHI53W



| | |
|--|-----------|
| P/NO : XZxxx53x | |
| QTY : 2,000 pcs | CODE: XXX |
| S/N : XX | |
| LOT NO : | |
|  XXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| RoHS Compliant | |