

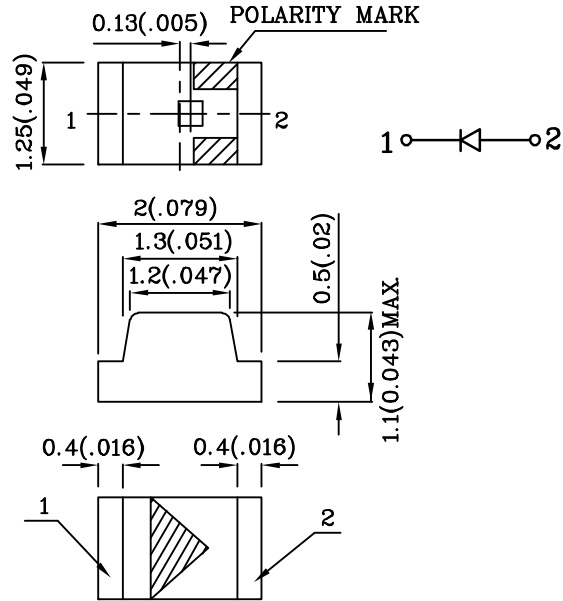
**Features**

- 2.0mmx1.25mm 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:

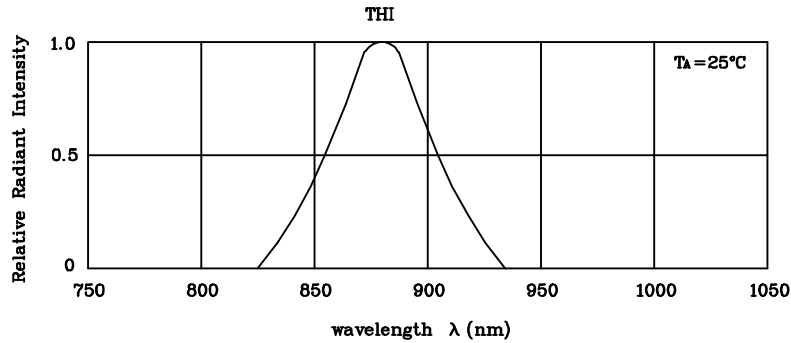
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$ " unless otherwise noted.
3. Specifications are subject to change without notice.



Absolute Maximum Ratings (TA=25°C)		THI (GaAlAs)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	50	mA
Forward Current (Peak) 1/100 Duty Cycle 10us Pulse Width	i <sub>FS</sub>	1.2	A
Power Dissipation	P <sub>T</sub>	80	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	

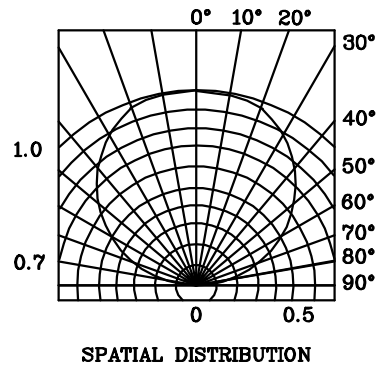
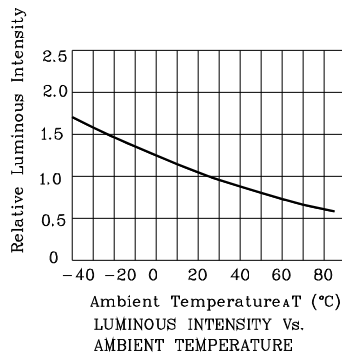
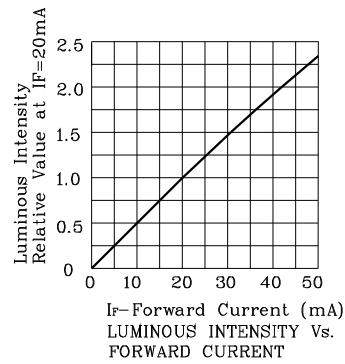
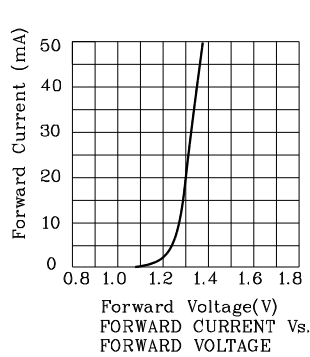
Operating Characteristics (TA=25°C)		THI (GaAlAs)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	1.3	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	1.6	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	10	uA
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λ <sub>P</sub>	880	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	50	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	90	pF

Part Number	Emitting Material	Lens-color	Luminous Intensity (P <sub>0</sub> =Mw/sr) @20mA		Wavelength nm λ <sub>P</sub>	Viewing Angle 2θ 1/2
			min.	typ.		
ZTHI54W	GaAlAs	Water Clear	0.4	0.8	880	120°
Published Date : FEB 28,2008      Drawing No : SDSA0508      V6      Checked : B.L.LIU      P.1/4						

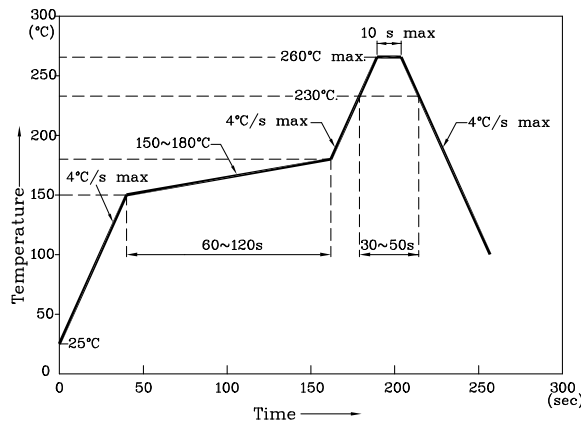


RELATIVE INTENSITY Vs. WAVELENGTH

❖ **THI**



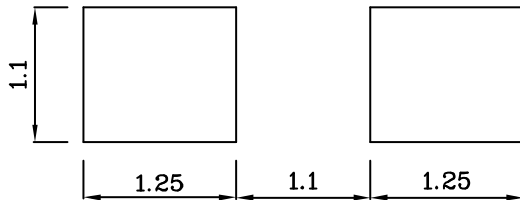
Reflow Soldering Profile For Lead-free SMT Process.



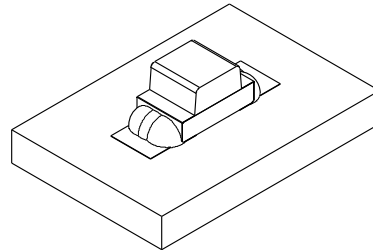
NOTES:

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.

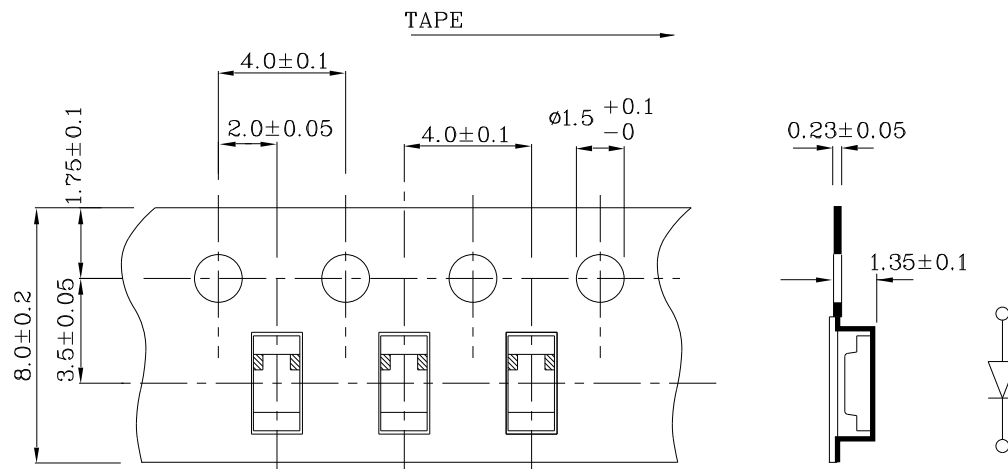
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

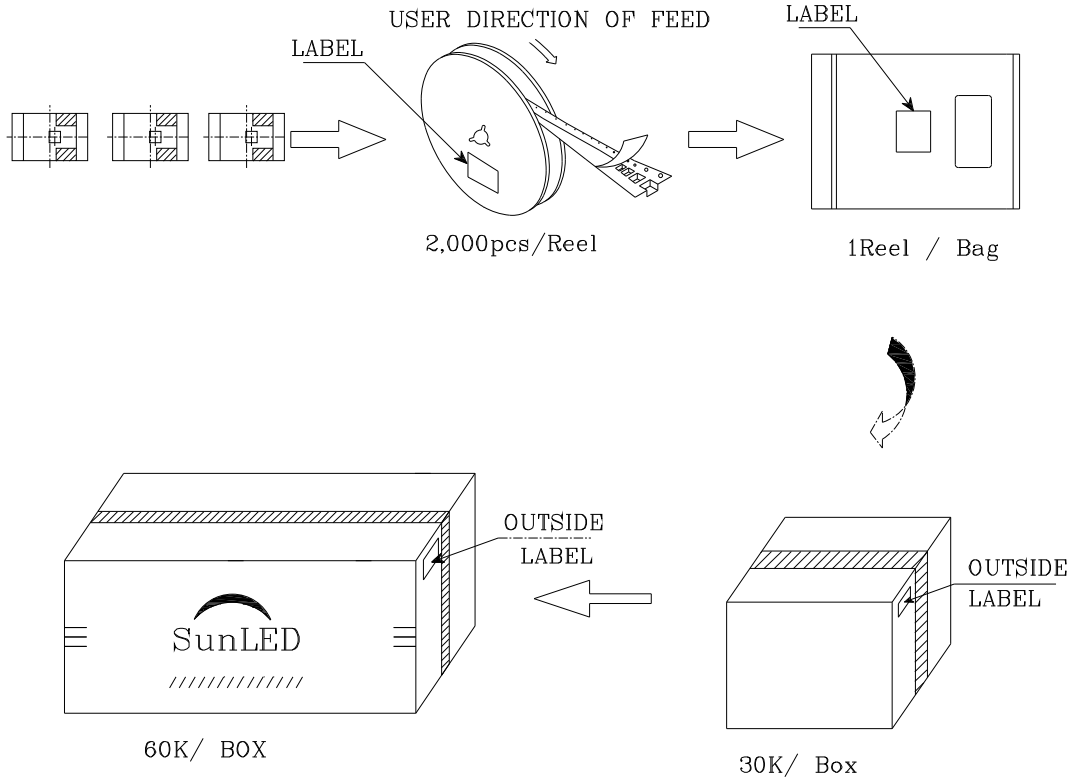

If special sorting is required (e.g. binning based on forward voltage or radiant intensity / luminous flux), the typical accuracy of the sorting process is as follows:

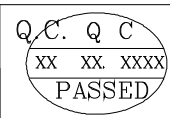

1. Radiant Intensity / Luminous Flux: +/-15%
2. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters

**PACKING & LABEL SPECIFICATIONS**

**ZTHI54W**

	
P/NO : Zxxx54x	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO:	
	
<p>xxxxxxxxxxxxxxxxxxxxxxxx</p> <p>RoHS Compliant</p>	