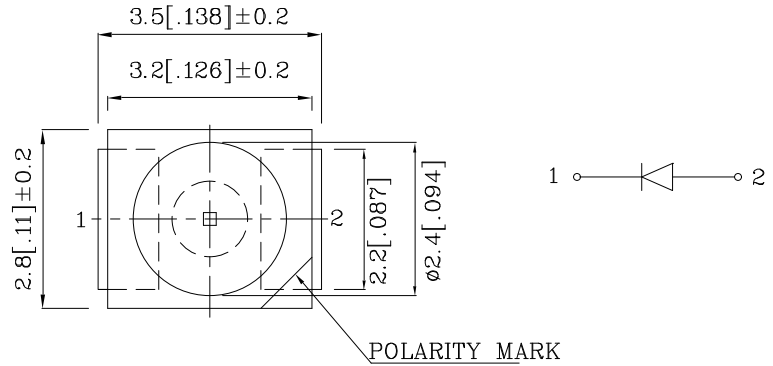


PRELIMINARY SPEC

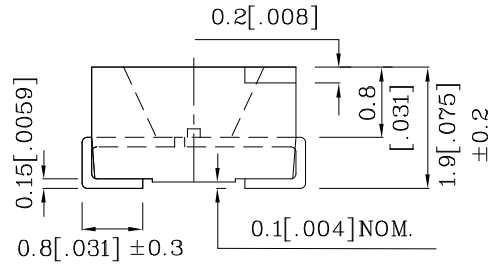
**Features**

- MECHANICALLY AND SPECTRALLY MATCHED TO THE PHOTOTRANSISTOR.
- WATER CLEAR LENS.
- PACKAGE : 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



Notes:

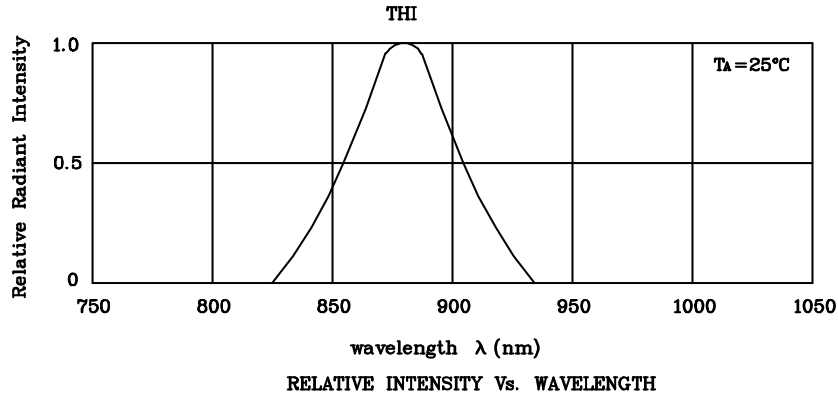
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. Specifications are subject to change without notice.



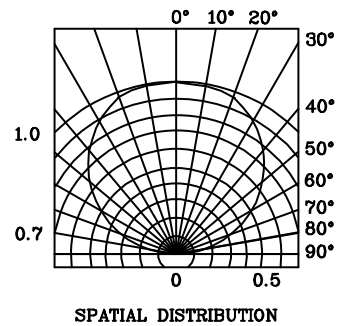
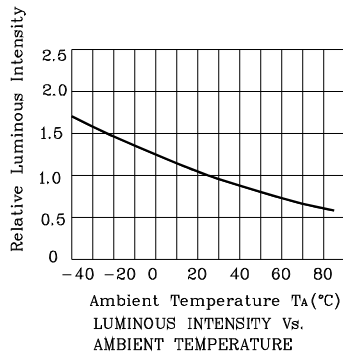
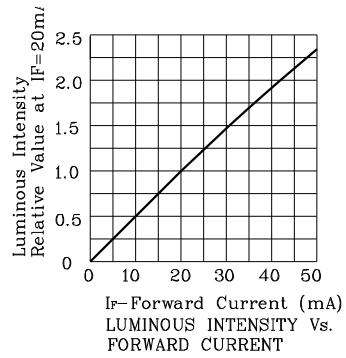
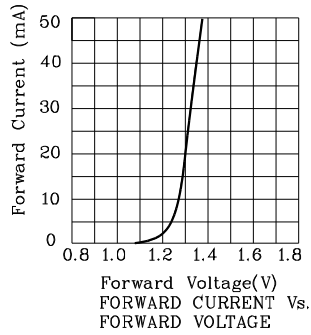
Absolute Maximum Ratings (TA=25°C)		THI (GaAlAs)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	50	mA
Forward Current (Peak) 1/100 Duty Cycle 10us Pulse Width	iFS	1.2	A
Power Dissipation	PT	80	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	

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)	λ P	880	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	50	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	90	pF

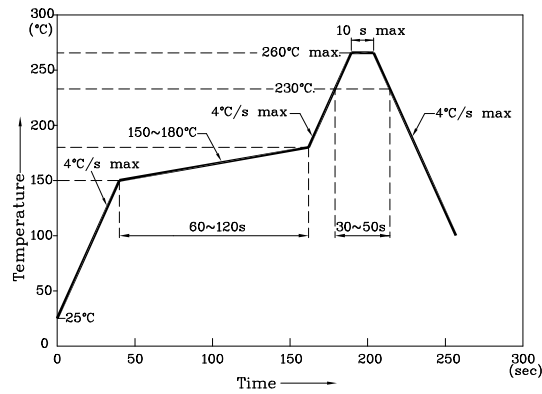
Part Number	Emitting Material	Lens-color	Luminous Intensity (Po=Mw/sr) @20mA *50mA		Wavelength nm λ P	Viewing Angle 2 θ 1/2
			min.	typ.		
ZTHI45W	GaAlAs	Water Clear	0.4 *4	2.8 *7	880	120 °



❖ **THI**



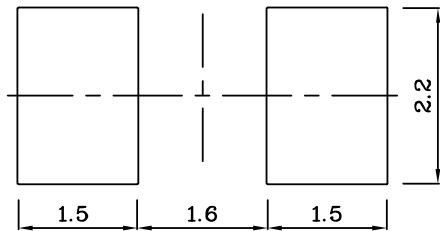
Reflow Soldering Profile For Lead-free SMT Process.



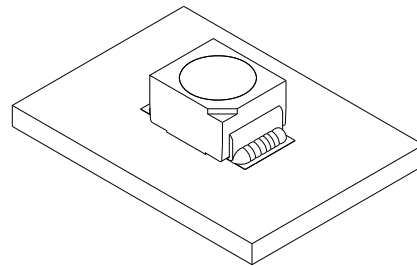
NOTES:

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.

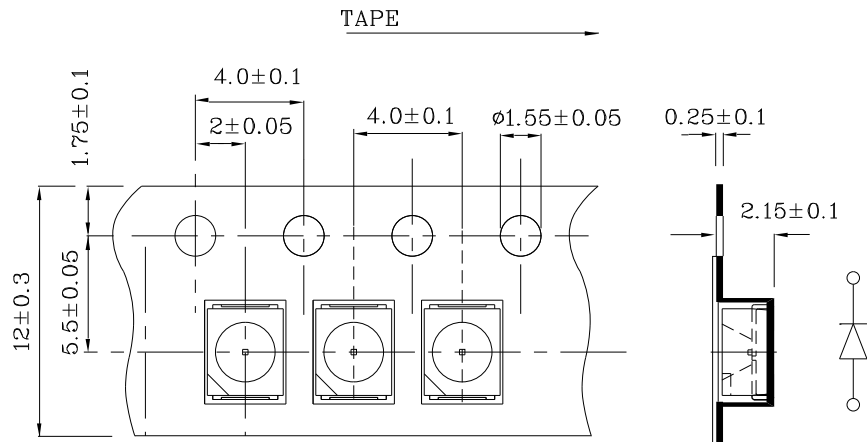
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance: ±0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

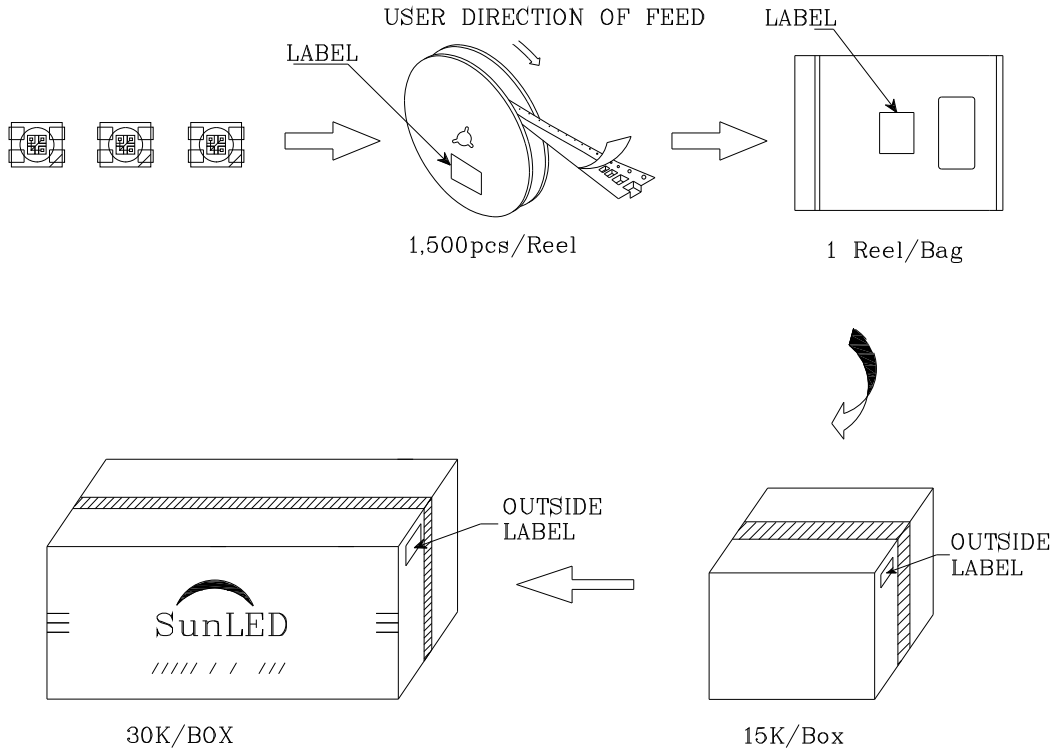

If special sorting is required (e.g. binning based on forward voltage or radiant intensity / luminous flux), the typical accuracy of the sorting process is as follows:

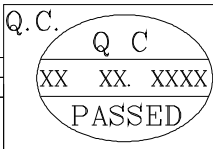

1. Radiant Intensity / Luminous Flux: +/-15%
2. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**ZTHI45W**

	
P/NO : Zxxx45x	
QTY : 1,500 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	