

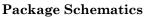
# Part Number: XZTHI55W-3

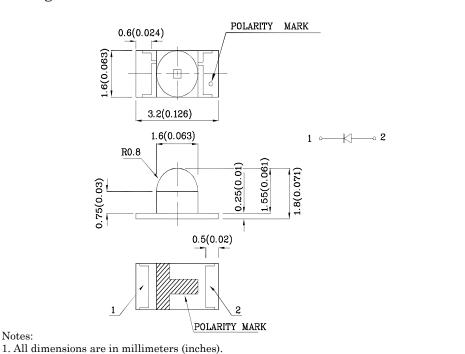
3.2x1.6mm INFRARED EMITTING DIODE

#### Features

- Long life and robust package
- •Standard Package: 2,000pcs/ Reel
- $\bullet \mathrm{MSL}$  (Moisture Sensitivity Level): 3
- $\bullet RoHS$  compliant







2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.

3. Specifications are subject to change without notice.

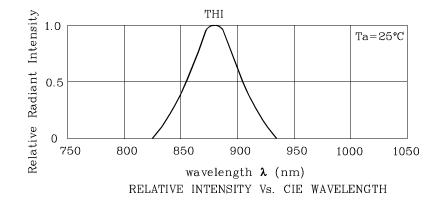
Absolute Maximum Ratings (T <sub>A</sub> =25°C)		THI (GaAlAs)	Unit	
Reverse Voltage	VR	5	V	
Forward Current	$\mathbf{I}_{\mathbf{F}}$	50	mA	
Forward Current (Peak) 1/100 Duty Cycle 10us Pulse Width	i <sub>FS</sub>	1200	mA	
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	80	mW	
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

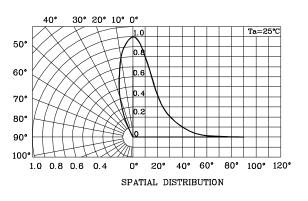
Operating Characteristics (T <sub>A</sub> =25°C)		THI (GaAlAs)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	1.3	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	1.6	V	
Reverse Current (Max.) $(V_R=5V)$	$I_R$	10	uA	
Wavelength of Peak Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λP	880*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	50	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	90	$_{\rm pF}$	

Part Number	Emitting Material	Lens-color	CIE12'	W/sr)	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
			min.	typ.		
XZTHI55W-3	GaAlAs	Water Clear	1.6*	3.8*	880*	35°

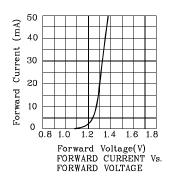
\*Radiant intensity value and wavelength are in accordance with CIE127-2007 standards.

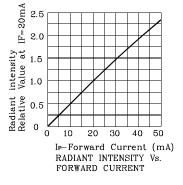


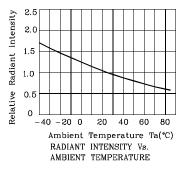




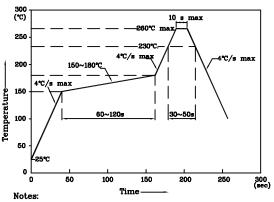
✤ THI







# LED is recommended for reflow soldering and soldering profile is shown below.



Reflow Soldering Profile for SMD Products (Pb-Free Components)

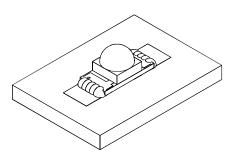
1. Maximum soldering temperature should not exceed 260°C

2. Recommended reflow temperature: 145°C-260°C 3. Do not put stress to the epoxy resin during

high temperatures conditions



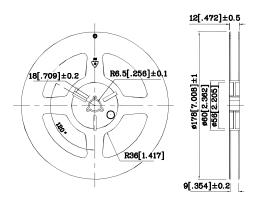
✤ The device has a single mounting surface. The device must be mounted according to the specifications.



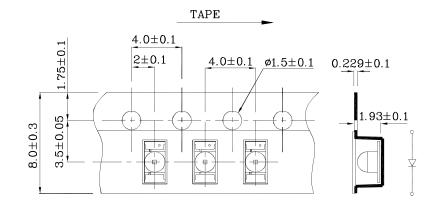
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



# 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:

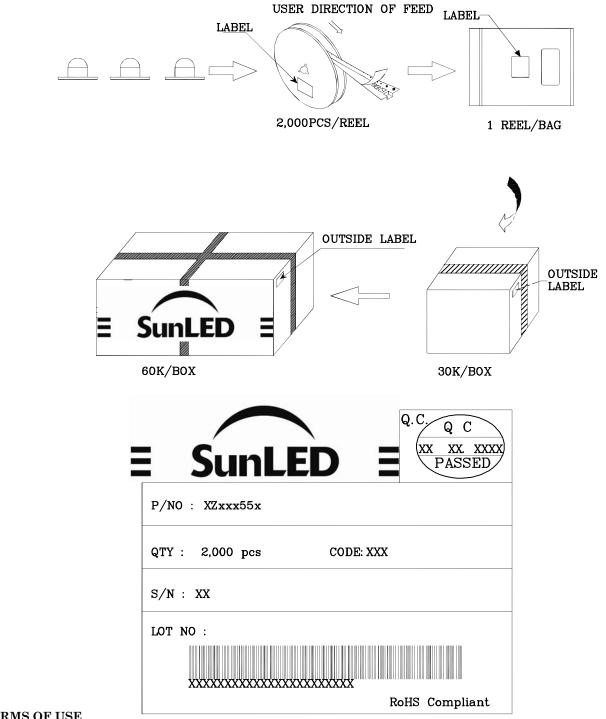
1. Radiant Intensity / Luminous Flux: +/-15%

2. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters



### **PACKING & LABEL SPECIFICATIONS**



#### **TERMS OF USE**

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet.
- User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please
- consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
- 5. The contents within this document may not be altered without prior consent by SunLED.
- 6. Additional technical notes are available at http://www.SunLEDusa.com/TechnicalNotes.asp