# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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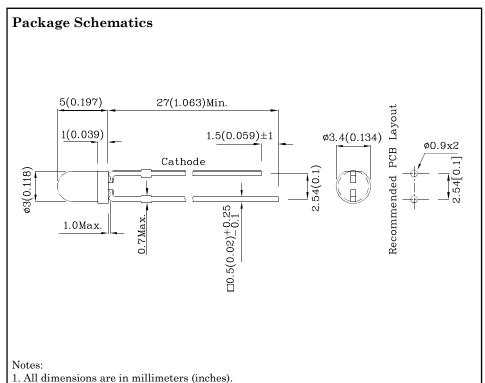


### Part Number: XTHI30W

#### T-1 (3mm) INFRARED EMITTING DIODE

- Radial / Through hole package
- $\bullet$  Reliable & robust
- Low power consumption
- Available on tape and reel
- RoHS Compliant





- 2. Tolerance is  $\pm 0.25(0.01")$  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	$V_{R}$	5	V		
Forward Current	$\mathrm{I}_\mathrm{F}$	50	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	1200	mA		
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	80	mW		
Operating Temperature	$T_A$ -40 ~ +85		°C		
Storage Temperature	Tstg	$-40 \sim +85$			
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds				
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds				

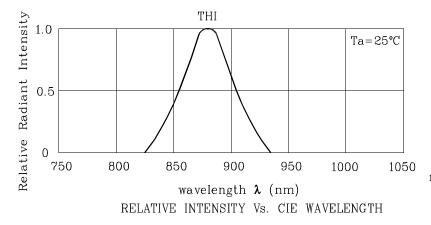
A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

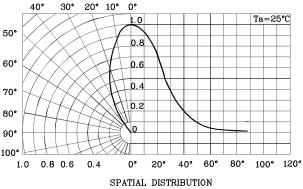
Operating Characteristics (T <sub>A</sub> =25°C)	THI (GaAlAs)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	1.3	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	1.6	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_{R}$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λΡ	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	$\mathrm{pF}$

Part Number	Emitting Material	Lens-color	Radiant Intensity CIE127-2007* (Po=mW/sr) @20mA		CIE12 (Po=n	Intensity 7-2007* nW/sr) 0mA	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
			min.	typ.	min.	typ.		
XTHI30W	GaAlAs	Water Clear	3*	15*	5*	19*	880*	50°

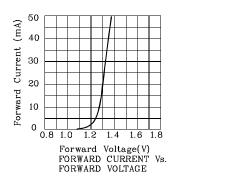
\*Radiant intensity value and wavelength are in accordance with CIE127-2007 standards.

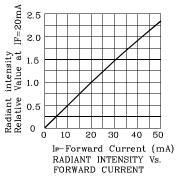


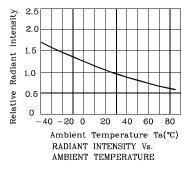




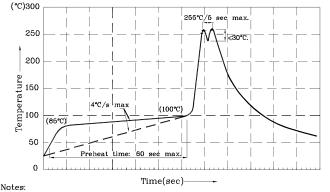
♦ THI







Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



I.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
2.Peak wave soldering temperature between 245°C ~ 255°C for 3 sec

(5 sec max).

3.Do not apply stress to the epoxy resin while the temperature is above  $85^{\circ}$ C. 4.Fixtures should not incur stress on the component when mounting and

during soldering process. 5.SAC 305 solder alloy is recommended.

6.No more than one wave soldering pass

#### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux),

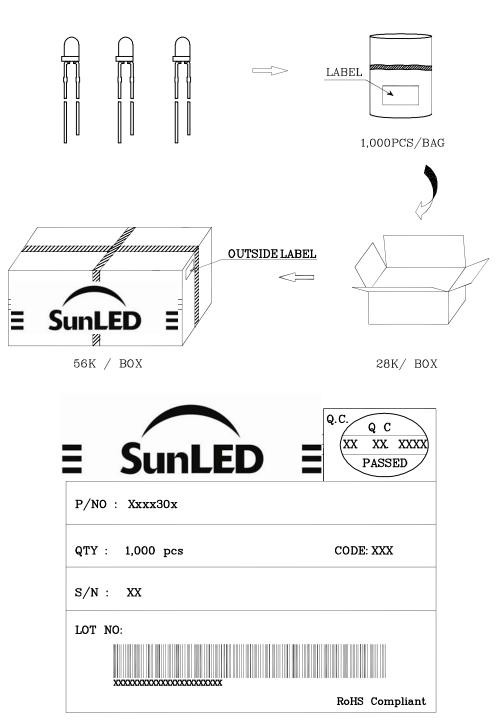
the typical accuracy of the sorting process is as follows:

- 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.
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