

Part Number: XLUR12D

T-1 3/4 (5mm) SOLID STATE LAMP

Features

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



ackage Sche:	<u>39] 27[1.063]M</u> .039] 1.5[lin.	ø5.9[0.232]
61.01 92[0.197]	Max, - 0	2.54[0.1]	Recommended PCB Lay
1 <u>.01</u> otes:			ø <u>0.9x2</u>

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 (T _A =25°C)	Red (GaAsP/GaP)	Unit	
Reverse Voltage	V_{R}	5	V
Forward Current	$\mathbf{I}_{\mathbf{F}}$	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	160	mA
Power Dissipation	PD	75	mW
Operating Temperature	T_A -40 ~ +85		°C
Storage Temperature	Tstg	'stg -40 ~ +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		

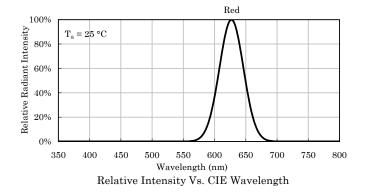
A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

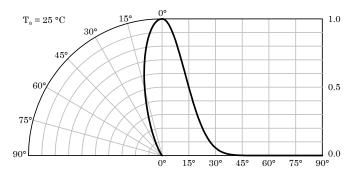
Operating Characteristics (T _A =25°C)	Red (GaAsP/GaP)	Unit	
Forward Voltage (Typ.) (I _F =10mA)	$V_{\rm F}$	1.9	V
Forward Voltage (Max.) (I _F =10mA)	$V_{\rm F}$	2.3	V
Reverse Current (Max.) (V _R =5V)	I_R	10	uA
Wavelength of Peak Emission CIE127-2007*(Typ.) (I _F =10mA)	λP	627*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I _F =10mA)	λD	617*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =10mA)	$ riangle\lambda$	45	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	15	pF

Part Number	Emitting Color	Emitting Material	- Long-color		Intensity 7-2007* 0mA) cd	Wavelength CIE127-2007* nm λΡ	Viewing Angle 20 1/2
				min.	typ.		
XLUR12D			25	49		0.00	
	Red	GaAsP/GaP	Red Diffused	18*	39*	- 627*	30°

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

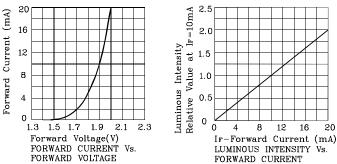


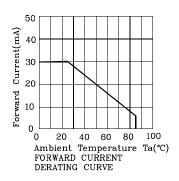


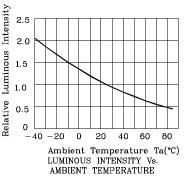


Spatial Distribution

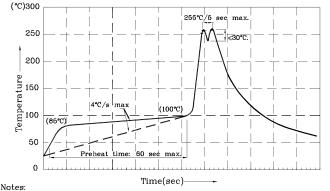
Red







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° 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, or wavelength),

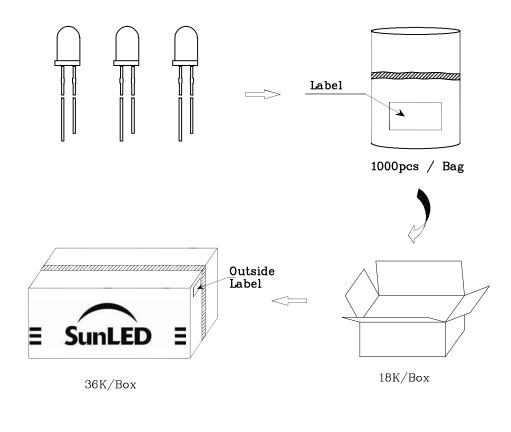
the typical accuracy of the sorting process is as follows:

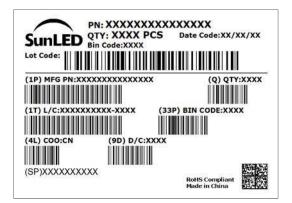
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS





TERMS OF USE

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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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- 6. Additional technical notes are available at <u>https://www.SunLEDusa.com/TechnicalNotes.asp</u>

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