

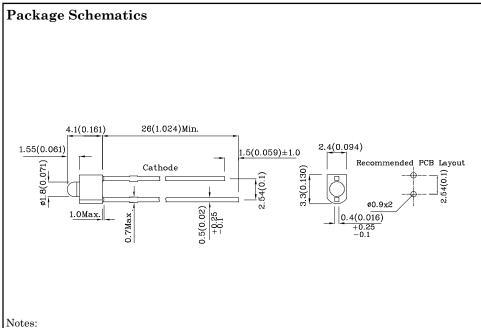
# Part Number: XLUR61D-A

### 1.8mm SOLID STATE LAMP

### Features

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





- 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 <sub>A</sub> =25°C)		Red (GaAsP/GaP)	Unit		
Reverse Voltage	$V_{\rm R}$	5	V		
Forward Current	$I_{\rm F}$	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	160	mA		
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	75	mW		
Operating Temperature	$T_{\rm A}$	-40 ~ +85			
Storage Temperature	Tstg	$-40 \sim +85$	°C		
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)		Red (GaAsP/GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\rm F}$	1.9	V
Forward Voltage (Max.) (I <sub>F</sub> =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 <sub>F</sub> =10mA)	λP	627*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	617*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$ riangle \lambda$	45	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =10mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLUR61D-A	Red	GaAsP/GaP	Red Diffused	8 4*	14* 7*	627*	70°

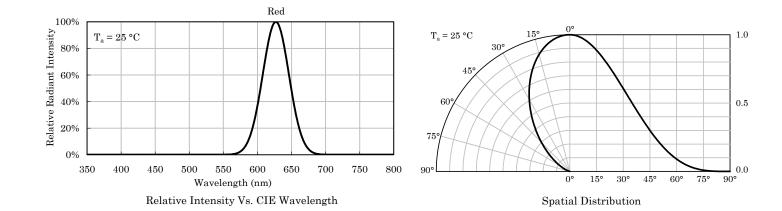
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Nov 09,2018

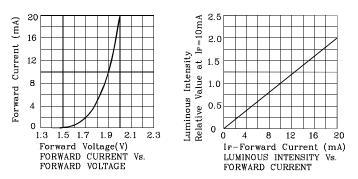
XDSB8795 V2-X Layout: Maggie L.

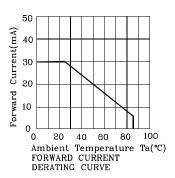


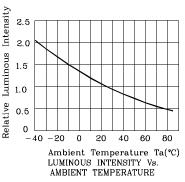
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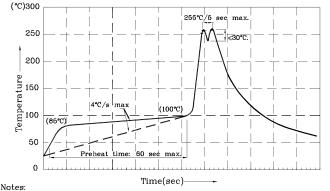
✤ Red







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

2. Peak wave soldering temperature between  $245^{\circ}$ C ~  $255^{\circ}$ 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.

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),

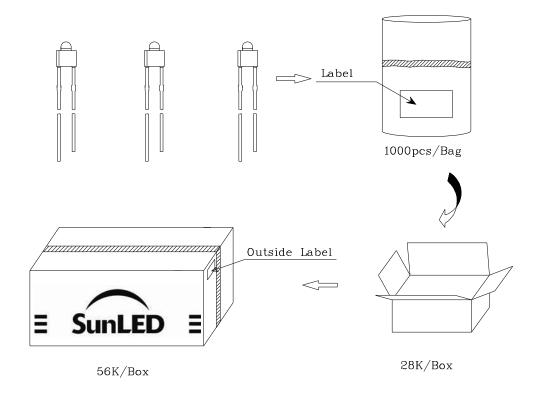
the typical accuracy of the sorting process is as follows:

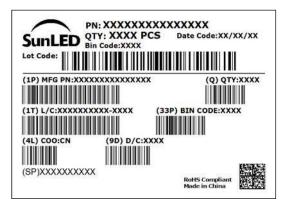
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

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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- 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.
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- 6. Additional technical notes are available at <u>https://www.SunLEDusa.com/TechnicalNotes.asp</u>

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