

1.8mm Solid State Lamp

Features

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







ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

Package Schematics 3.1(0.122) 27(1.063)Min. 2.4(0.094) 1.55(0.061) $1.5(0.059)\pm1$ Cathode ø1.8(0.071) 3.3(0.13) 0.7Max. 1.0Max. 0.5(0.02) $0.4(0.016)^{+0.25}_{-0.1}$ $^{+0.25}_{-0.1}$ Recommended PCB Layout Ø0.9x2

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 (T _A =25°C)		Green (AlGaInP)	Unit		
Reverse Voltage	V_{R}	5	V		
Forward Current	I_{F}	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA		
Power Dissipation	P_{D}	75	mW		
Operating Temperature	T _A -40 ~ +85		°C		
Storage Temperature	Tstg	-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				

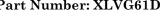
A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics (T _A =25°C)		Green (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	2.1	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.5	V
Reverse Current (Max.) (V _R =5V)	I_R	10	μA
Wavelength of Peak EmissionCIE127-2007* (Typ.) (I _F =20mA)	λΡ	574*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA)	λD	570*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$\triangle \lambda$	20	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLVG61D	Green	AlGaInP	Green Diffused	55*	79*	574*	90°

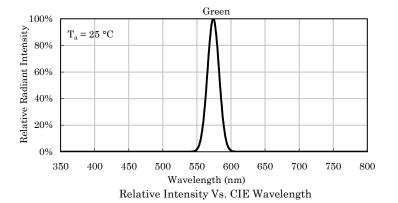
 $^{^*}$ Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

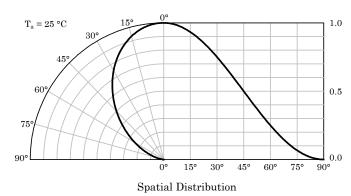
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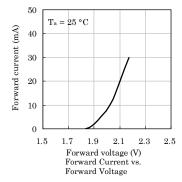


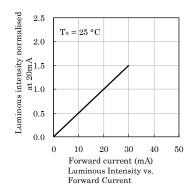


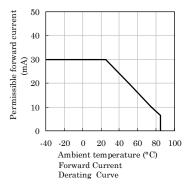


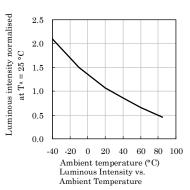


❖ Green

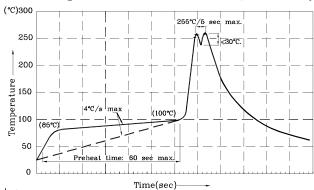








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



Notes:

- 1.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 $85\,^\circ\text{C}.$ 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:

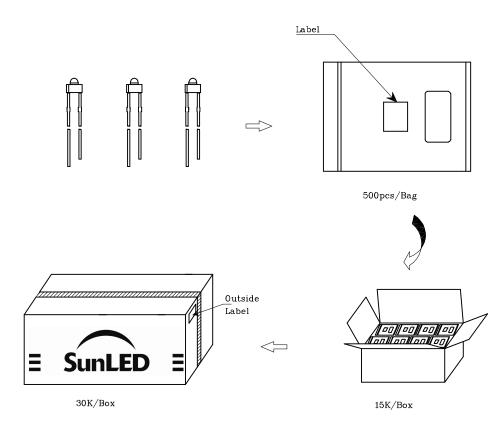
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

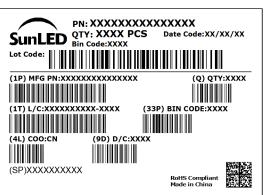
Note: Accuracy may depend on the sorting parameters.





PACKING & LABEL SPECIFICATIONS





TERMS OF USE

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- $6.\ Additional\ technical\ notes\ are\ available\ at\ \underline{https://www.SunLEDusa.com/TechnicalNotes.asp}$