

Part Number: XLCWD11W



T-1 (3mm) SOLID STATE LAMP

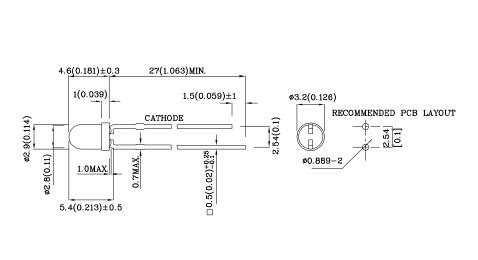
Features

- 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





1. All dimensions are in millimeters (inches).

Package Schematics

2. Tolerance is $\pm 0.25 (0.01")$ unless otherwise noted.

3. Specifications are subject to change without notice.

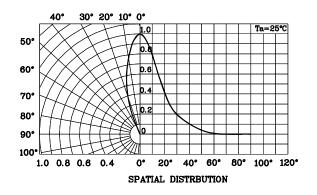
Absolute Maximum Ratings (T _A =25°C)	CWD (InGaN)	Unit		
Reverse Voltage	V_{R}	V _R 5		
Forward Current	$I_{\rm F}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	10 Duty Cycle i _{FS}			
Power Dissipation	\mathbf{P}_{D}	120	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Threshold (HBM)	250	V		
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds			
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds			

Operating Characteristics $(T_A=25^{\circ}C)$		CWD (InGaN)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	3.3	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	4	V
Reverse Current (Max.) (V _R =5V)	I_R	50	uA
Chromaticity Coordinates	x	0.31	
(Typ.)	У	0.31	
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	100	pF

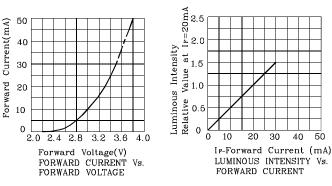
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (IF=20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLCWD11W	White	InGaN	Water Clear	800*	1495*	460*	34°

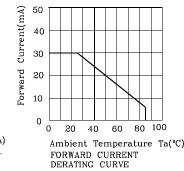
*Luminous intensity is in accordance with ${\rm CIE127\text{-}2007}$ standards.

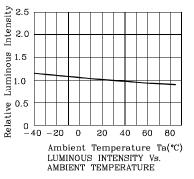




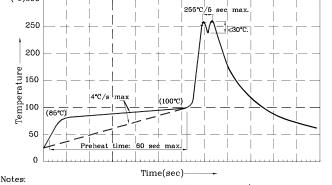
CBD







Wave Soldering Profile For Thru-Hole Products (Pb-Free Components) (°C)300



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).

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 chromaticity), the typical accuracy of the sorting process is as follows:

- 1. Measurement tolerance of the chromaticity coordinates is ± 0.02 .
- 2. Luminous Intensity/ Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

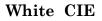
3.Do not apply stress to the epoxy resin while the temperature is above 85°C. Note: Accuracy may depend on the sorting parameters. 4.Fixtures should not incur stress on the component when mounting and during reducting restored.

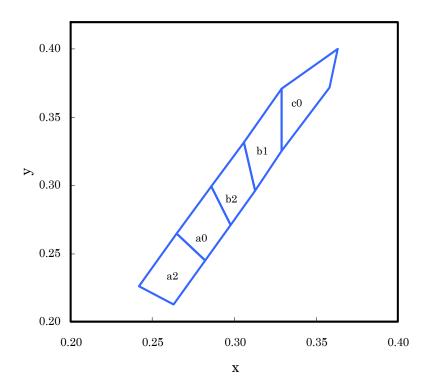
50

30 40



XLCWD11W





	x	У		x	У		x	у
	0.263	0.213	a0	0.282	0.245		0.298	0.271
a2	0.282	0.245		0.298	0.271	b2	0.313	0.296
a2	0.265	0.265		0.286	0.299	02	0.306	0.332
	0.242	0.226		0.265	0.265		0.286	0.299
	0.313	0.296	cO	0.329	0.325			
b1	0.329	0.325		0.358	0.372			
~1	0.329 0.371		0.363	0.400				
	0.306	0.332		0.329	0.371			

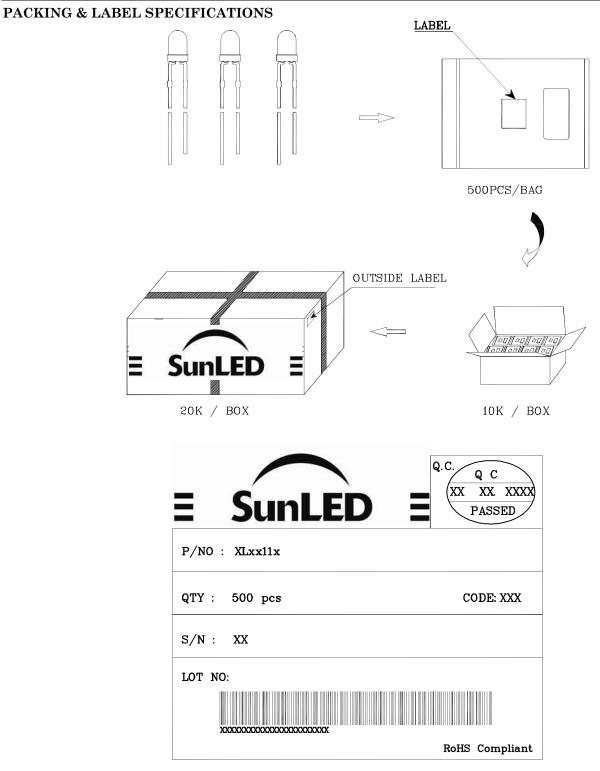
Notes:

Shipment may contain more than one chromaticity regions.

Orders for single chromaticity region are generally not accepted. Measurement tolerance of the chromaticity coordinates is ± 0.02 .



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