

Part Number: XLM2CRK14W

T-1 3/4 (5mm) Round LED Lamp

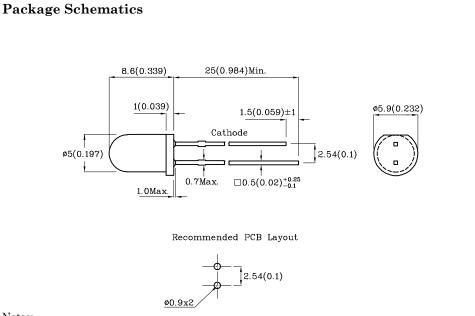
Features

- 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



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)		Red (AlGaInP)	Unit		
Reverse Voltage	V_{R}	5	V		
Forward Current	\mathbf{I}_{F}	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA		
Power Dissipation	\mathbf{P}_{D}	84	mW		
Operating Temperature	$T_{\rm A}$	T _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				

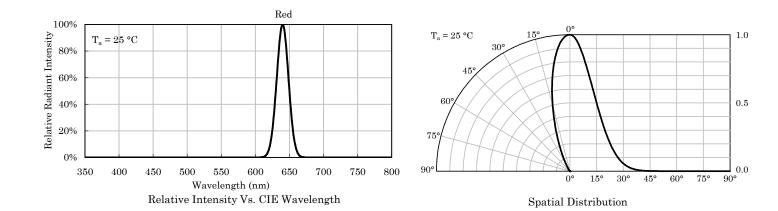
A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics (T _A =25°C)		Red (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	$V_{\rm F}$	2.2	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.8	V
Reverse Current (Max.) (V _R =5V)	I_R	10	μΑ
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λP	640*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA)	λD	625*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$ riangle\lambda$	20	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	27	pF

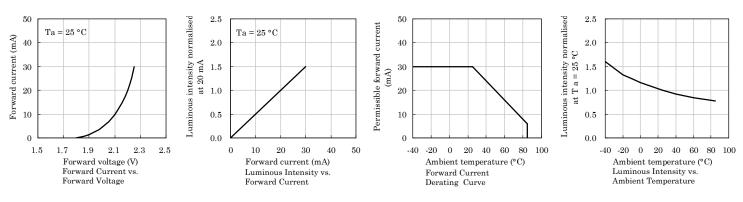
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLM2CRK14W	Red	AlGaInP	Water Clear	3600 1500*	5790 2890*	640*	30°

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

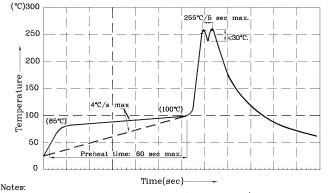




Red



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°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 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),

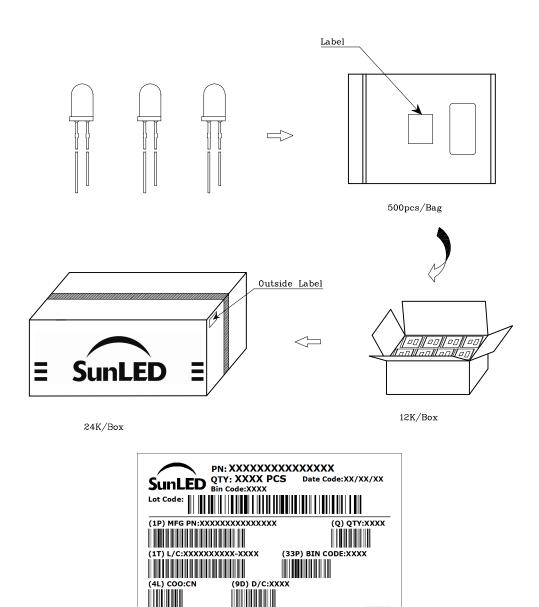
the typical accuracy of the sorting process is as follows:

- 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



RoHS Compliant Made in China

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.

(SP)XXXXXXXXXX

- 5. The contents within this document may not be altered without prior consent by SunLED.
- 6. Additional technical notes are available at <u>https://www.SunLEDusa.com/TechnicalNotes.asp</u>

Nov 24,2020