

Part Number: XLMDK11D14V

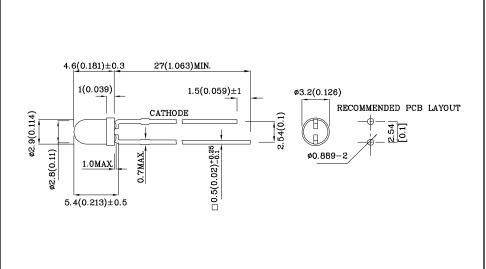
T-1 (3mm) SOLID STATE LAMP

Features

- Radial / Through hole package
- \bullet Reliable & robust
- Low power consumption
- Available on tape and reel
- \bullet 14V internal resistor.
- RoHS Compliant



ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



Notes:

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.

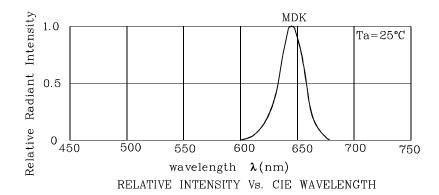
Absolute Maximum Ratings (T _A =25°C)		MDK (AlGaInP)	Unit		
Reverse Voltage	V_{R}	5	V		
Forward Voltage	$V_{\rm F}$	16	V		
Power Dissipation	P_{D}	160	mW		
Operating Temperature	TA	A -40 ~ +70			
Storage Temperature	Tstg	$-40 \sim +85$	°C		
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds				
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds				

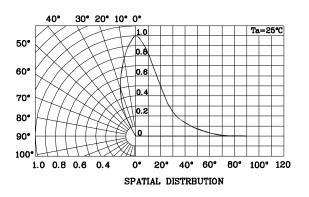
Operating Characteristics (T _A =25°C)		MDK (AlGaInP)	Unit
Forward Current (Typ.) (V _F =14V)	I_F	10.5	mA
Forward Current (Max.) (V _F =14V)	$I_{\rm F}$	13.5	mA
Reverse Current (Max.) (V _R =5V)	I_R	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (V _F =14V)	λP	645*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (V _F =14V)	λD	630*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (V _F =14V)	$ riangle \lambda$	28	nm

Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous Intensity} \\ \text{(CIE127-2007*} \\ \text{V}_{\text{F}} = 14\text{V}) \\ \text{mcd} \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLMDK11D14V	Red	AlGaInP	Red Diffused	120 30*	248 59*	645*	40°

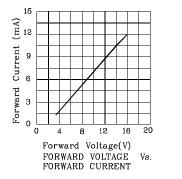
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

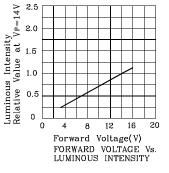


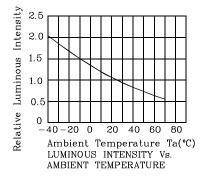




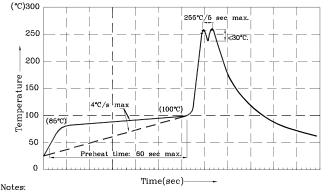
♦ MDK







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 Luminous intensity/ luminous flux, or wavelength),

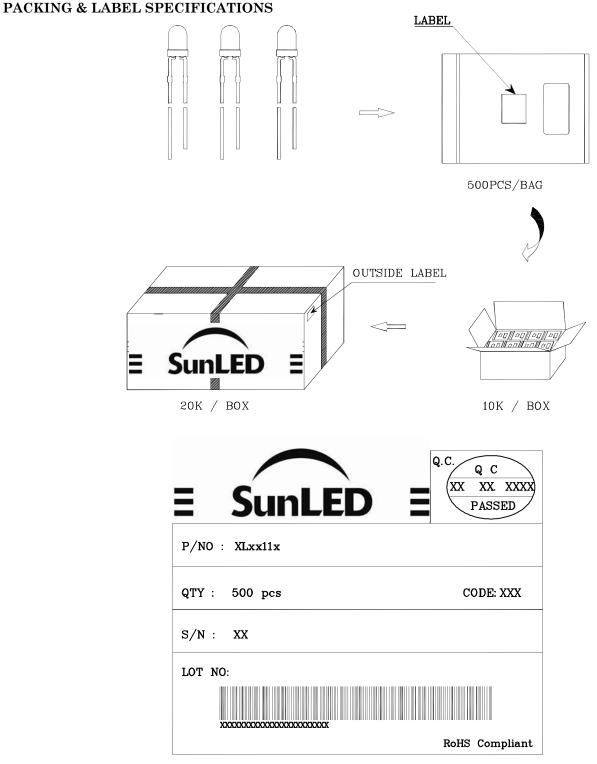
the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous intensity/ luminous flux: +/-15%

Note: Accuracy may depend on the sorting parameters.



T-1 (3mm) SOLID STATE LAMP



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 <u>http://www.SunLEDusa.com/TechnicalNotes.asp</u>