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T-1 (3mm) Solid State Lamp

Features

- VersoLEDs: Versatile Solutions
- Radial / Through hole package
- Reliable & robust
- Low power consumption
- Available on tape and reel
- Halogen-free
- RoHS Compliant







ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

Package Schematics $4.6(0.181)\pm0.3$ 27(1.063)Min. 1(0.039) $1.5(0.059)\pm1$ ø3.2(0.126) Cathode ø2.9(0.114) ø2.8(0.11) □ 0.5(0.02) 0.7Max. 1.0Max. $5.4(0.213)\pm0.5$ Recommended PCB Layout 2.54(0.1) 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)		Red (AlGaInP)	Unit		
Reverse Voltage	$V_{\rm R}$	5	V		
Forward Current	I_{F}	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	I_{FP}	150	mA		
Power Dissipation	P_{D}	75	mW		
Operating Temperature	$T_{\rm A}$	$\Gamma_{\rm A}$ -40 ~ +85			
Storage Temperature	Tstg	-40 ~ +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)

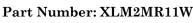
Operating Characteristics (T _A =25°C)		Red (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	2.1	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.5	V
Reverse Current (Max.) $(V_R=5V)$	I_R	10	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λP	660*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA)	λD	640*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	20	nm

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.		
XLM2MR11W	Red	AlGaInP	Water Clear	4200 1400*	7490 2490*	660*	30°

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

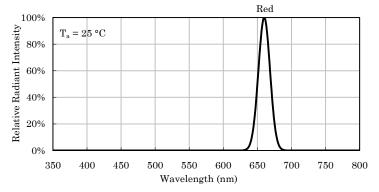
Mar 03,2023 XDSB7498 V7-X Layout: Maggie L.



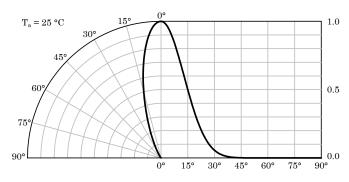




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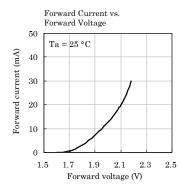


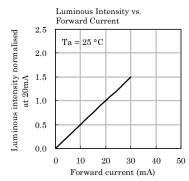
Relative Intensity Vs. CIE Wavelength

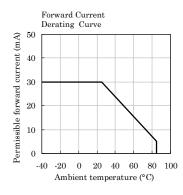


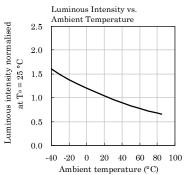
Spatial Distribution

❖ Red

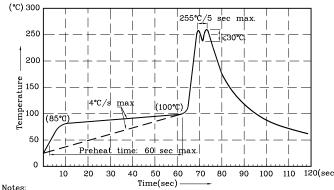








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



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 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.

Mar 03,2023

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%

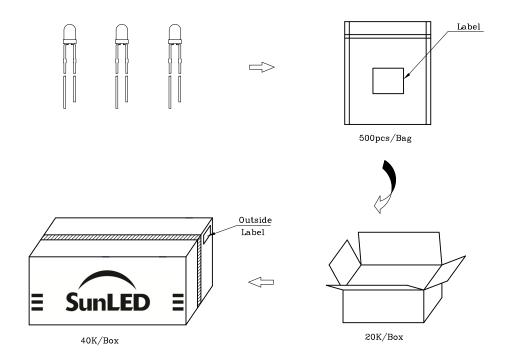
3. Forward Voltage: +/-0.1V

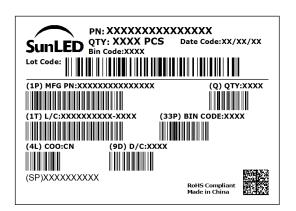
Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS

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