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T-1 (3mm) Solid State Lamp

# **Features**

- Radial / Through hole package
- $\bullet$  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.

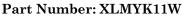
Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Yellow (AlGaInP)	Unit		
Reverse Voltage	$V_{\mathrm{R}}$	5	V		
Forward Current	$I_{\mathrm{F}}$	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	175	mA		
Power Dissipation	$P_D$	75	mW		
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C		
Storage Temperature	Tstg	-40 ~ +85	-0		
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 <sub>A</sub> =25°C)		Yellow (AlGaInP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λP	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	590*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	20	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLMYK11W	Yellow	AlGaInP	Water Clear	700*	1495*	590*	30°

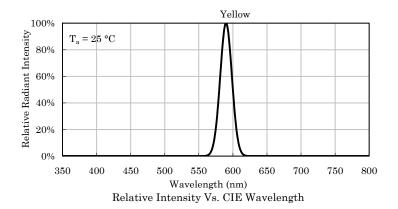
<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

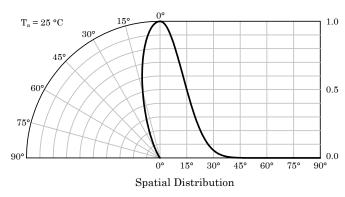


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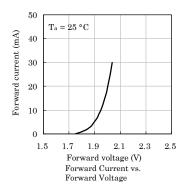


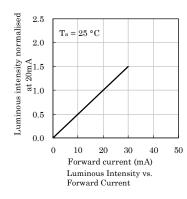


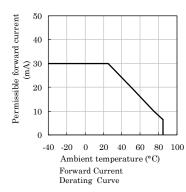


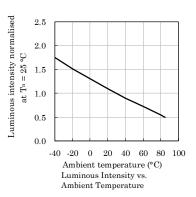


# **❖** Yellow

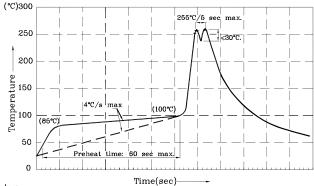








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



Notes:

- Notes. 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  $260^{\circ}C$  2. Peak wave soldering temperature between  $245^{\circ}C \sim 255^{\circ}C$  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),

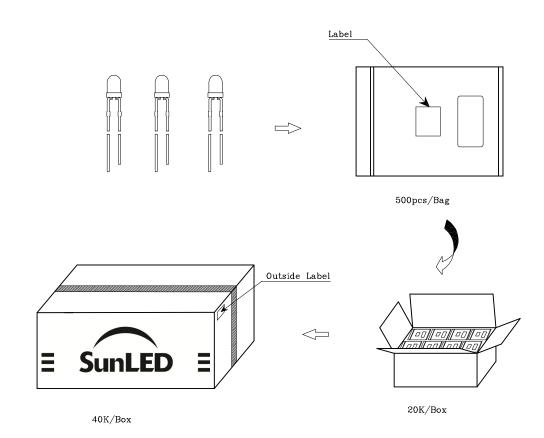
the typical accuracy of the sorting process is as follows:

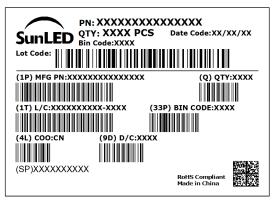
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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# PACKING & LABEL SPECIFICATIONS





# TERMS OF USE

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