

### Features

- Radial / Through hole package
- Reliable & robust
- Low power consumption
- •UV Epoxy Lens
- Available on tape and reel
- RoHS Compliant

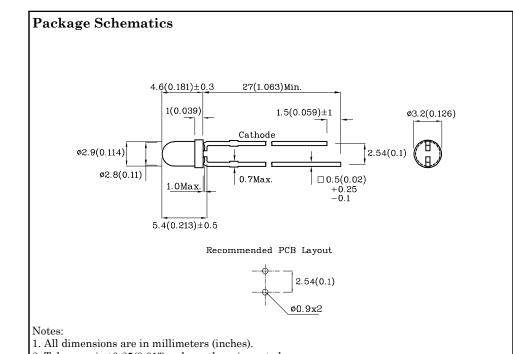




ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

# Part Number: XLM2DG11W

T-1 (3mm) Solid State Lamp



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)		Green (InGaN)	Unit		
Reverse Voltage	$V_{\rm R}$	5	V		
Forward Current	$I_{\rm F}$	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	100	mA		
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	120	mW		
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C		
Storage Temperature	Tstg	$-40 \sim +85$			
Electrostatic Discharge Threshold (HBM)	450	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				

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)

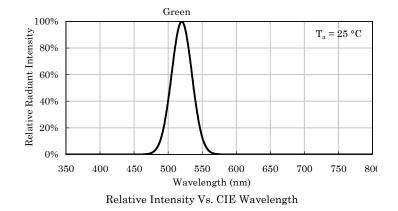
Operating Characteristics (T <sub>A</sub> =25°C)		Green (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	3.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	4	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	50	μΑ
Wavelength of Peak Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λP	520*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λD	525*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	100	pF

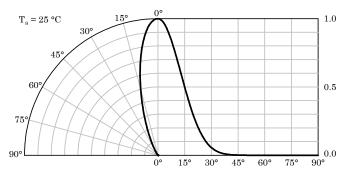
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLM2DG11W	Green	InGaN	Water Clear	10500*	16490*	520*	30°

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



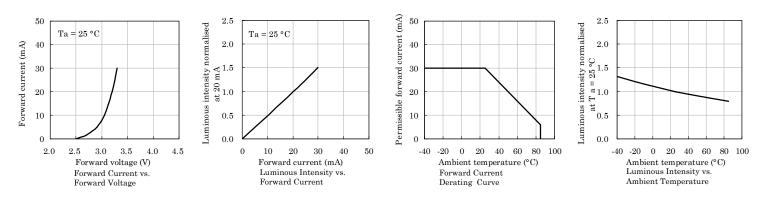
T-1 (3mm) Solid State Lamp



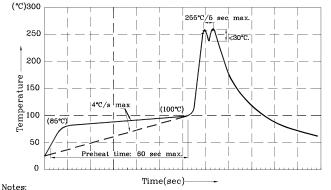


Spatial Distribution

## Green



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  $260^{\circ}$ C 2.Peak wave soldering temperature between  $245^{\circ}$ C  $\sim 255^{\circ}$ C for 3 sec

2. Peak wave soldering temperature between  $245^{\circ}$ C ~  $255^{\circ}$ 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.

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:

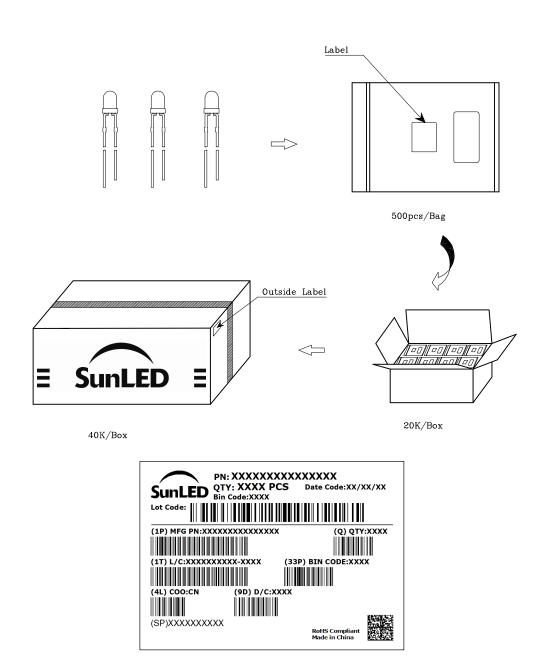
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



T-1 (3mm) Solid State Lamp

## PACKING & LABEL SPECIFICATIONS



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