

# Part Number: XLM2ACY12W

T-1 3/4 (5mm) SOLID STATE LAMP

### Features

- Radial / Through hole package
- $\bullet$  Reliable & robust
- Low power consumption
- $\bullet$  Available on tape and reel
- $\bullet$  RoHS Compliant



Package Schematics			
8.6[0.339]  27[1.063] MIN.    1[0.039]	1.5[0.059]±1	¢5.9[0.232]	RECOMMENDED PCB LAYOUT
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.

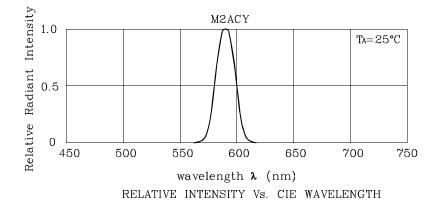
Absolute Maximum Ratings (T <sub>A</sub> =25°C)		M2ACY (AlGaInP)	Unit	
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$\mathbf{I}_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	140	mA	
Power Dissipation	PD	75	mW	
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C	
Storage Temperature	Tstg	$-40 \sim +85$	-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			

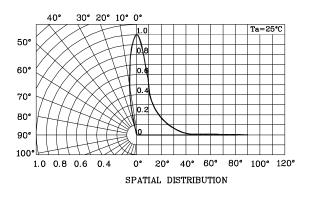
Operating Characteristics (T <sub>A</sub> =25°C)		M2ACY (AlGaInP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (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)	$ riangle\lambda$	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	45	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.		
XLM2ACY12W	Yellow	AlGaInP	Water Clear	4200*	5990*	590*	20°

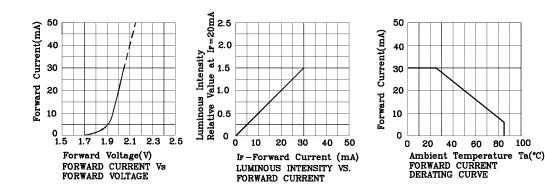
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

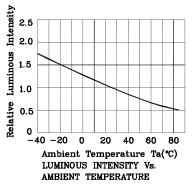




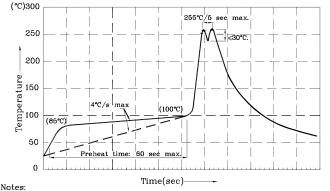


### ♦ M2ACY





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  $85^{\circ}$ 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

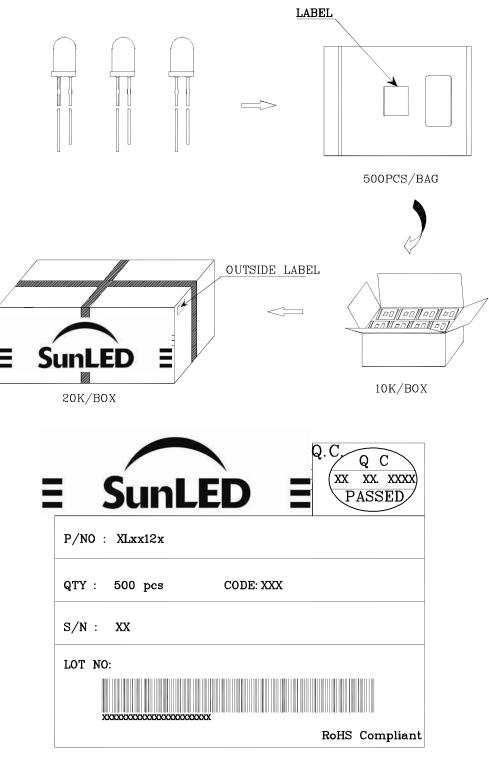
80 100

Note: Accuracy may depend on the sorting parameters.

#### Mar 25,2014



## **PACKING & LABEL SPECIFICATIONS**



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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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