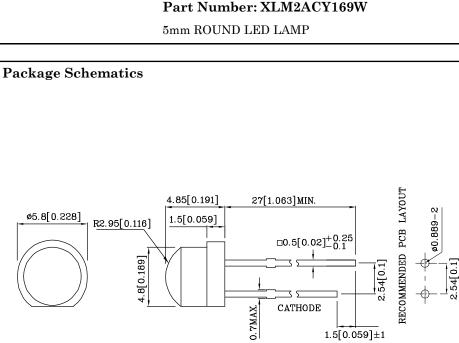


## **Features**

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





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	$\mathbf{P}_{\mathrm{D}}$	75	mW		
Operating Temperature	$T_{\rm A}$	$T_A \qquad -40 \sim +85$			
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				

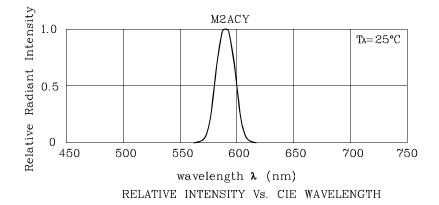
Operating Characteristics (T <sub>A</sub> =25°C)		M2ACY (AlGaInP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (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

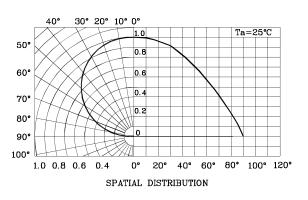
1.5[0.059]±1

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.		
XLM2ACY169W	Yellow	AlGaInP	Water Clear	400*	695*	590*	130°

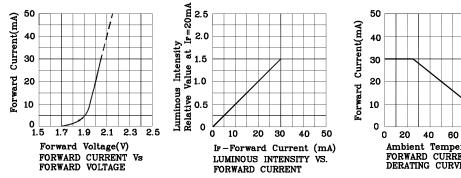
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



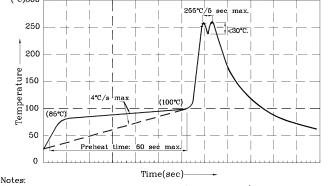




## ✤ M2ACY



Wave Soldering Profile For Thru-Hole Products (Pb-Free Components) (°C)300



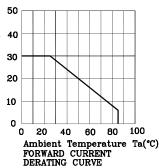
I.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
2.Peak wave soldering temperature between 245°C ~ 255°C for 3 sec

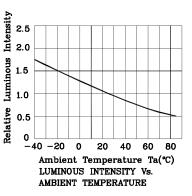
(5 sec max).

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:

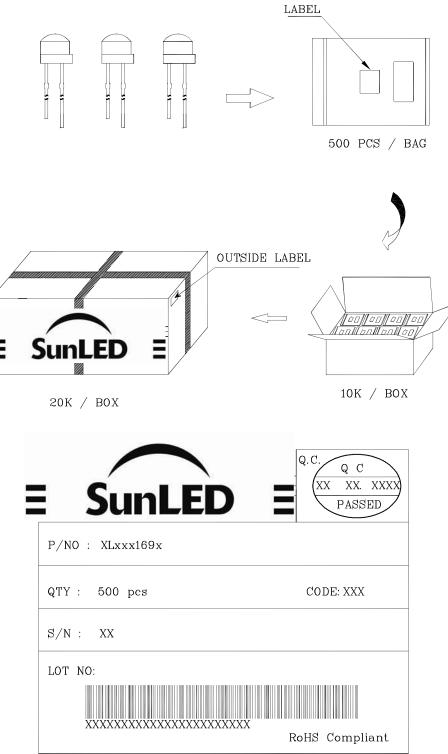
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



5mm ROUND LED LAMP

# **PACKING & LABEL SPECIFICATIONS**



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- 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
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