# **Excellent Integrated System Limited**

Stocking Distributor

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SunLED XLM2ACR169W

For any questions, you can email us directly: sales@integrated-circuit.com



# Distributor of SunLED: Excellent Integrated System Limited

Datasheet of XLM2ACR169W - LED RED CLEAR 4.8MM ROUND T/H

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com



Part Number: XLM2ACR169W

5mm ROUND LED LAMP

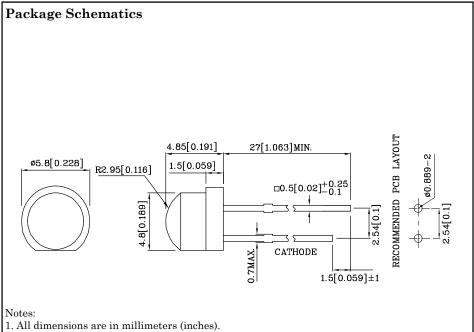
#### **Features**

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

Mar 25,2014







- 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)		M2ACR (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	$i_{\mathrm{FS}}$	150	mA	
Power Dissipation	$P_{D}$	84	mW	
Operating Temperature	$T_A$ -40 ~ +85		°C	
Storage Temperature	Tstg	-40 ~ +85		
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)	M2ACR (AlGaInP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.8	V
Reverse Current (Max.) $(V_R=5V)$	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λΡ	640*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λD	625*	nm
pectral Line Full Width t Half-Maximum (Typ.) _F=20mA)		25	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	27	pF

Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} Luminous\ Intensity\\ CIE127\text{-}2007^*\\ (I_F\text{=}20\text{mA})\\ mcd \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLM2ACR169W	Red	AlGaInP	Water Clear	700 400*	995 695*	640*	130°

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



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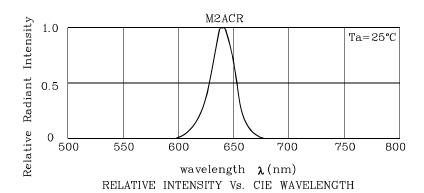
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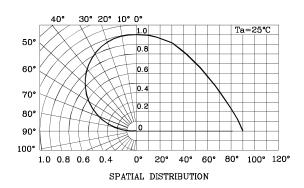
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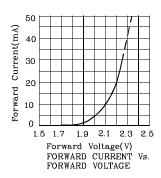
Part Number: XLM2ACR169W

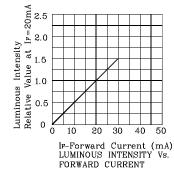
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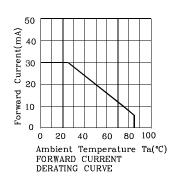


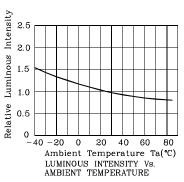


#### **❖** M2ACR

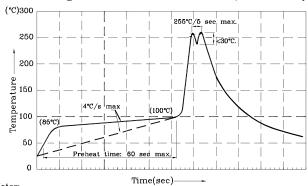








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



- Notes: 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
- (a) Sec links.

  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.

### 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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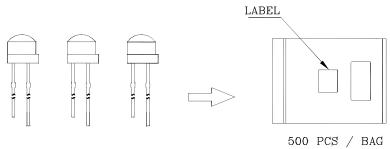
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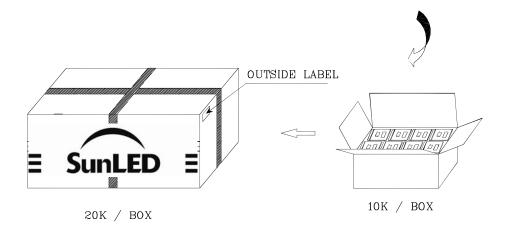


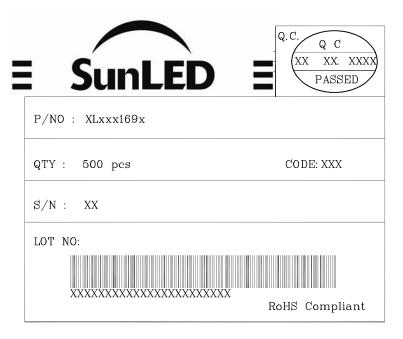
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#### PACKING & LABEL SPECIFICATIONS







## TERMS OF USE

Mar 25,2014

- 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.
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- 6. Additional technical notes are available at <a href="http://www.SunLEDusa.com/TechnicalNotes.asp">http://www.SunLEDusa.com/TechnicalNotes.asp</a>

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XDSB2856 V5-X Layout: Maggie L.