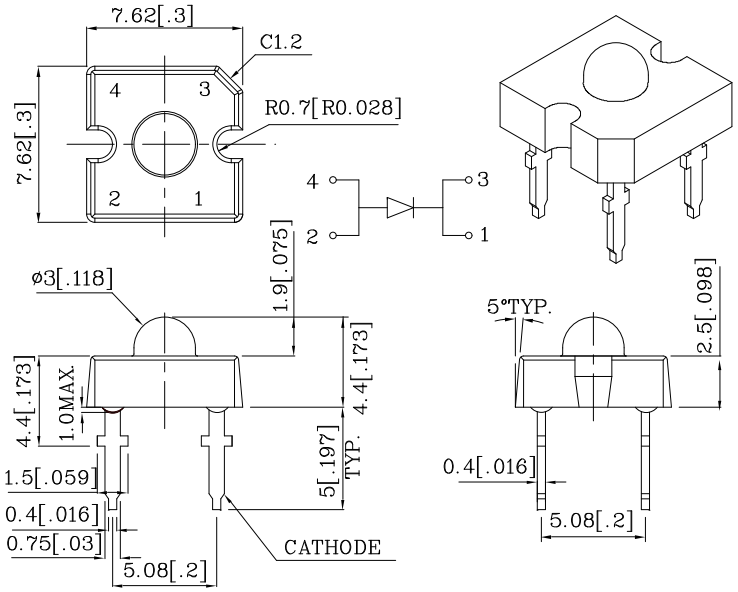
SunLED
www.SunLEDusa.com

Part Number: **XSM2ACR883W**

SUPER FLUX LED LAMP

Features

- ●High luminance output.
- ●Design for high current operation.
- ●Uniform color.
- ●Low power consumption.
- ●Low thermal resistance.
- ●Low profile.
- ●Packaged in tubes for use with automatic insertion equipment.
- ●Soldering methods: wave soldering .
- ●RoHS compliant.



Benefits:

*Outstanding Material Efficiency.

*Electricity savings.

*Maintenance savings.

*Reliable and Rugged.

Typical Applications:

*Automotive Exterior Lighting.

*Electronic Signs and Signals.

*Specialty Lighting.

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

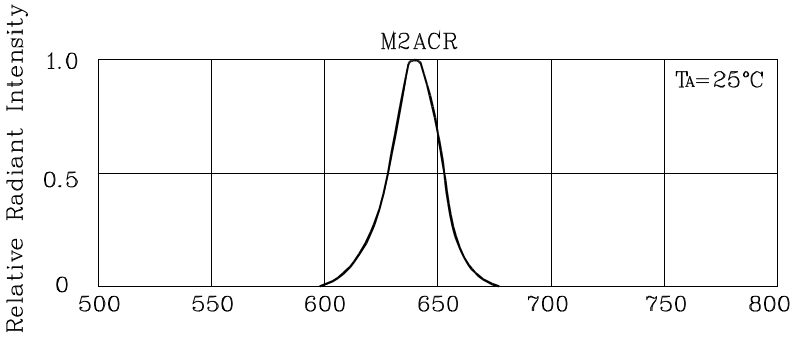
Absolute Maximum Ratings (T_A=25°C)		**M2ACR (AlGaInP)**	**Unit**
Reverse Voltage	V_R	5	V
Forward Current	I_F	70	mA
Power Dissipation	P_D	210	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	Tstg	-55 ~ +85	
Lead Solder Temperature [1.5mm(0.06inch)Below Seating Plane.][1]	260°C For 5 Seconds		

1.No Reflow soldering .

Operating Characteristics (T_A=25°C)		**M2ACR (AlGaInP)**	**Unit**
Forward Voltage (Min.) (I_F=70mA)	V_F	2.2	V
Forward Voltage (Typ.) (I_F=70mA)	V_F	2.4	V
Forward Voltage (Max.) (I_F=70mA)	V_F	3.0	V
Reverse Current (Max.) (V_R=5V)	I_R	10	uA
Wavelength of Peak Emission (Typ.) (I_F=70mA)	λ P	640	nm
Wavelength of Dominant Emission (Typ.) (I_F=70mA)	λ D	625	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I_F=70mA)	Δλ	25	nm
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	27	pF
Thermal Resistance (Typ.)	Rθj-pin	125	°C/W

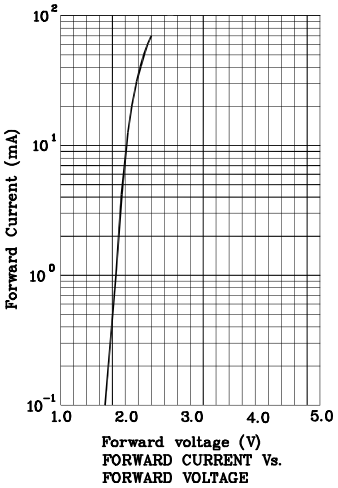
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=70mA) mcd		Luminous Intensity (IF=70mA) mlm	Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.	typ.		
XSM2ACR883W	Red	AlGaInP	Water Clear	8000	19990	6000	640	40°

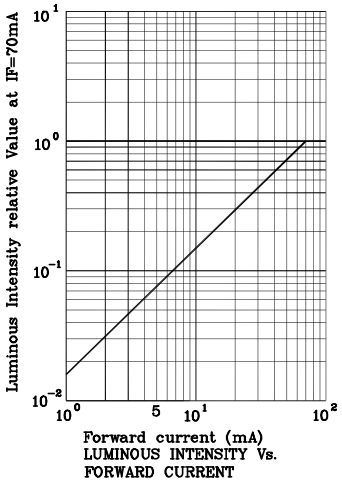
1.LUMINOUS INTENSITY IS MEASURED WITH AN INTEGRATING SPHERE AFTER THE DEVICE HAS STABILIZED.
2. θ 1/2 IS THE ANGLE FROM OPTICAL CENTERLINE WHERE THE LUMINOUS INTENSITY IS 1/2 OF THE OPTICAL PEAK VALUE.

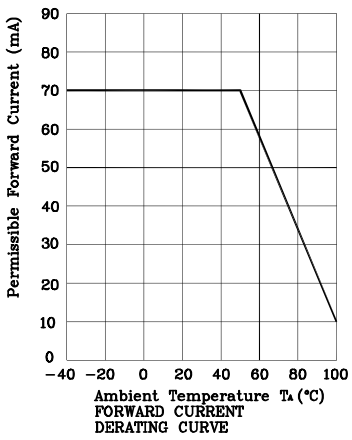


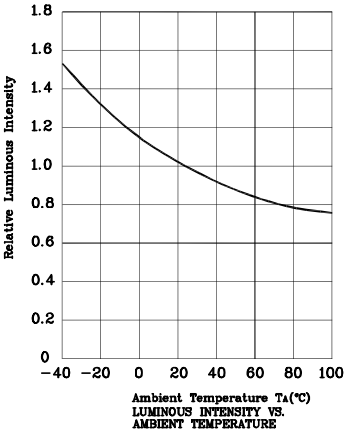
RELATIVE INTENSITY Vs. WAVELENGTH

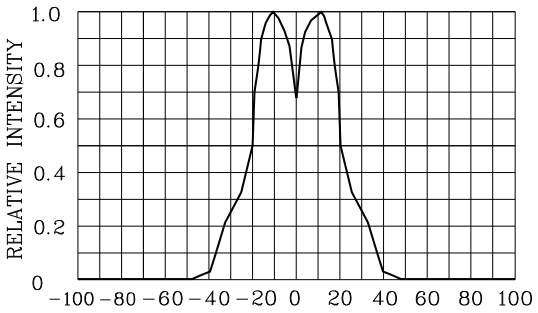
❖ **M2ACR**





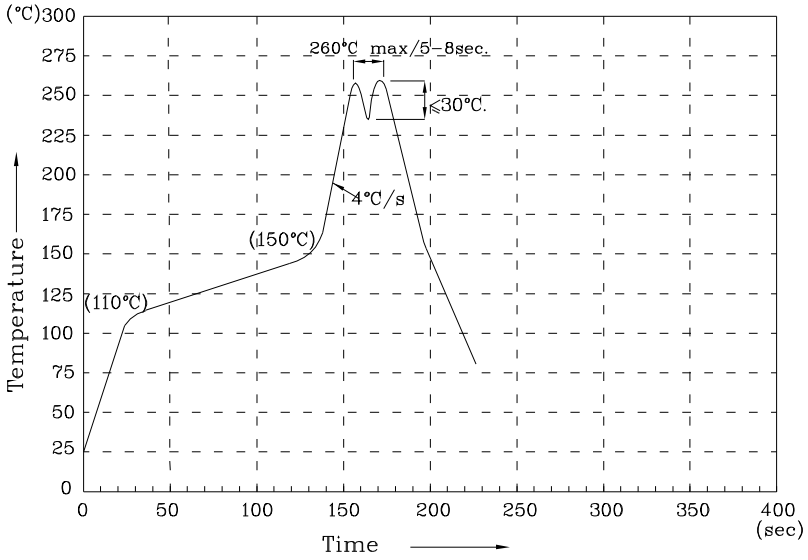






RELATIVE INTENSITY VS OFF AXIS ANGLE

Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

1. Recommend the wave temperature 245°C~260°C. The maximum soldering temperature should be less than 260°C.
2. Do not apply stress on epoxy resins when temperature is over 85 degree°C.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. No more than once.

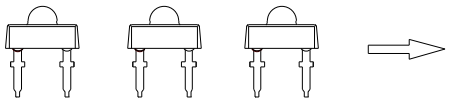
Remarks:

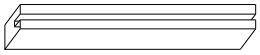
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

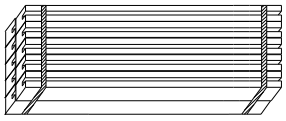
Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS **XSM2ACR883W**

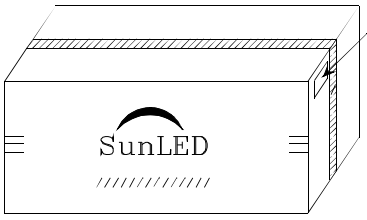


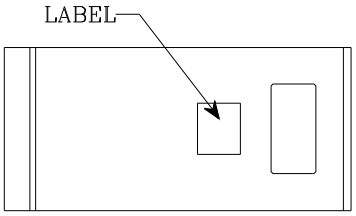


75PCS / IC TUBE(520x8.3x15mm)



750pcs / 10pcs IC TUBE





7.5K / BOX

10pcs IC TUBE / Bag