SunLED
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Part Number: XSM2ACR783W

SUPER FLUX LED LAMP

Features

- High current operation for greater luminous output
- Low power consumption and thermal resistance
- Can be used with automatic insertion equipment
- RoHS Compliant

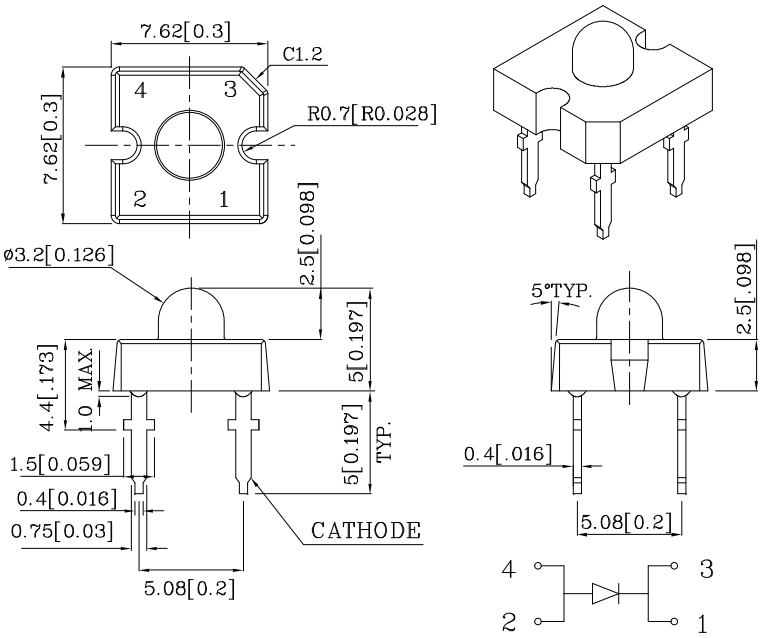
Benefits:

- Rugged design allows for easy maintenance
- Robust package for optimum reliability

Typical Applications:

- Automotive side markers
- Gaming and entertainment lighting
- Signs and road hazard indicators

Package Schematics



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.

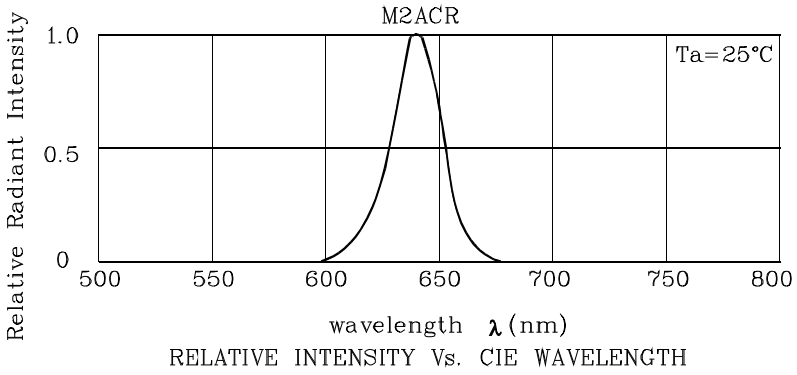
Absolute Maximum Ratings (T_A=25°C)		**M2ACR (AlGaInP)**	**Unit**
Reverse Voltage	V_R	5	V
DC Forward Current	I_F	70	mA
Power Dissipation	P_D	210	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	Tstg	-55 ~ +85	
Lead Solder Temperature [1.5mm(0.06inch)Below Seating Plane.[1]		260°C For 5 Seconds	

1.No Reflow soldering .

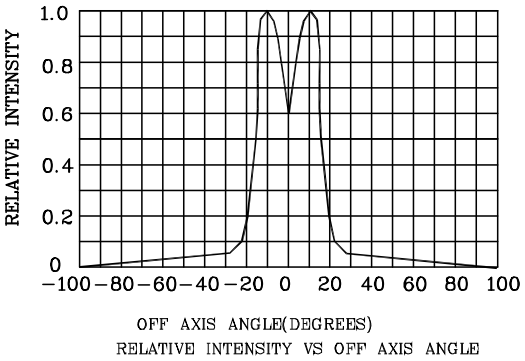
Operating Characteristics (T_A=25°C)		**M2ACR (AlGaInP)**	**Unit**
Forward Voltage (Min.) (I_F=70mA)	V_F	2.2	V
Forward Voltage (Typ.) (I_F=70mA)	V_F	2.4	V
Forward Voltage (Max.) (I_F=70mA)	V_F	3.0	V
Reverse Current (Max.) (V_R=5V)	I_R	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I_F=70mA)	λP	640*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I_F=70mA)	λD	625*	nm
Spectral Line Full Width At Half Maximum (Typ.) (I_F=70mA)	△λ	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 CIE127-2007* (I_F=70mA) cd		Luminous Flux CIE127-2007* (I_F=70mA) lm	Wavelength CIE127-2007* λP nm	Viewing Angle 2θ 1/2
				min.	typ.	typ.		
XSM2ACR783W	Red	AlGaInP	Water Clear	12 7*	21.99 13*	6*	640*	30°

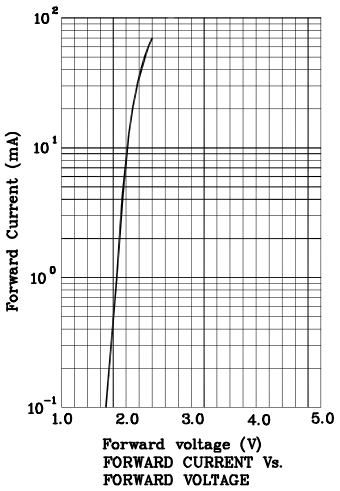
1.Luminous intensity is measured with an integrating sphere after the device has stabilized.
2.θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
3. LEDs are binned according to their Luminous intensity.
* Luminous intensity / luminous flux value and wavelength are in accordance with CIE127-2007 standards.



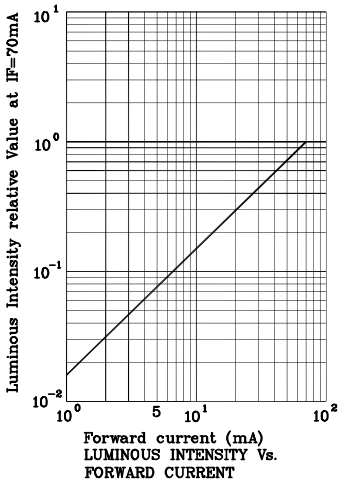
RELATIVE INTENSITY Vs. CIE WAVELENGTH



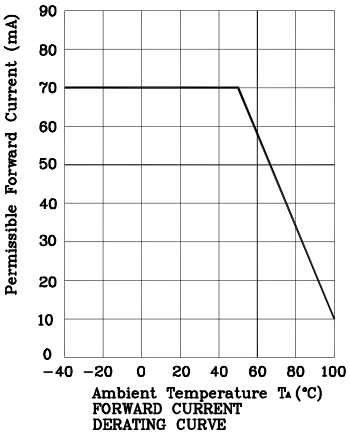
RELATIVE INTENSITY VS OFF AXIS ANGLE



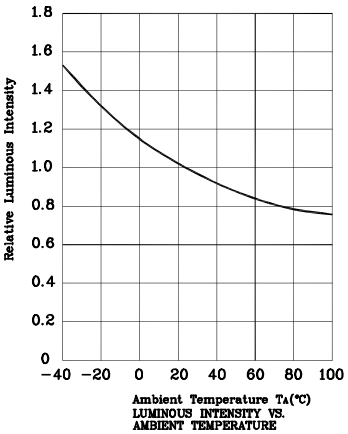
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

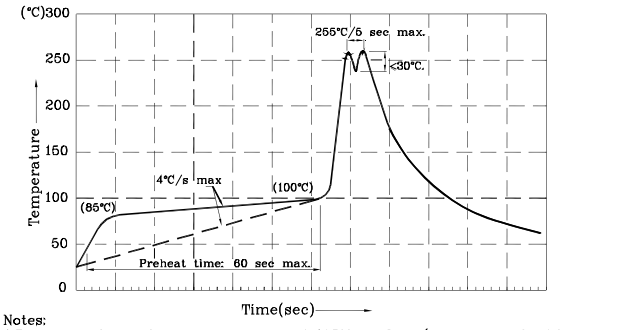


FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

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



Notes:
1. Recommend pre-heat temperature of 105℃ 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℃
2. Peak wave soldering temperature between 245℃ ~ 255℃ for 3 sec (5 sec max).
3. Do not apply stress to the epoxy resin while the temperature is above 85℃.
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.

PACKING & LABEL SPECIFICATIONS