

PRELIMINARY SPEC

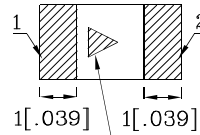
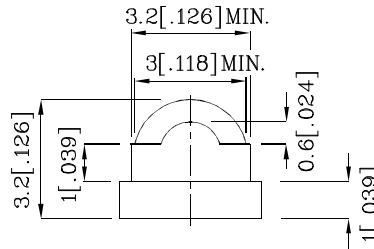
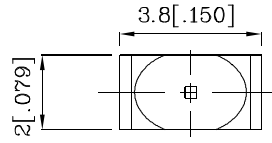
**Features**

- 3.8mmx2.0mm SMT LED, 3.2mm thickness.
- Low power consumption.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package : 500pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$ " unless otherwise noted.
3. Specifications are subject to change without notice.

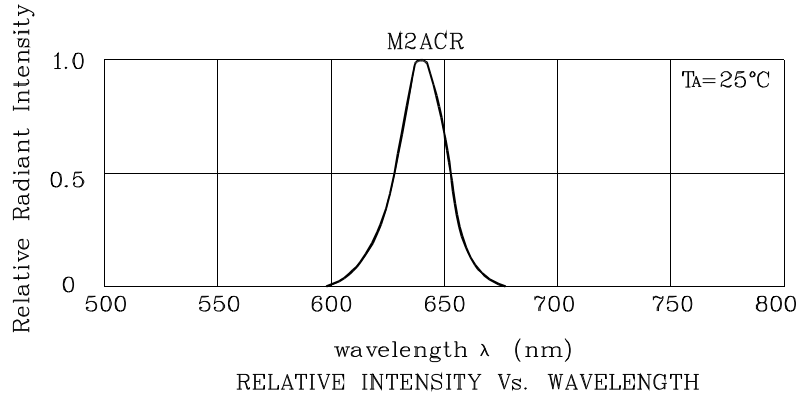


POLARITY MARK

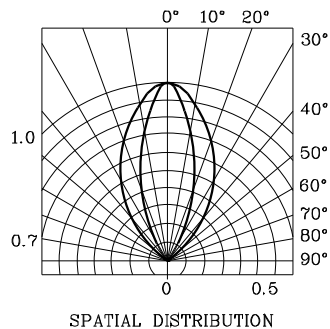
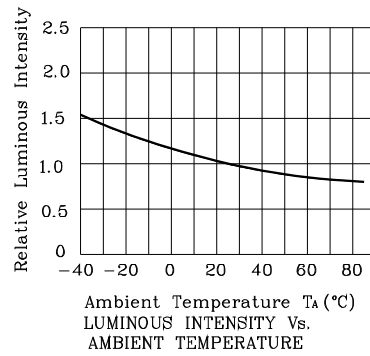
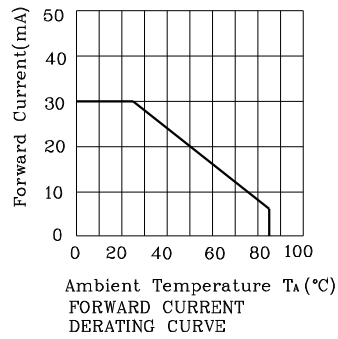
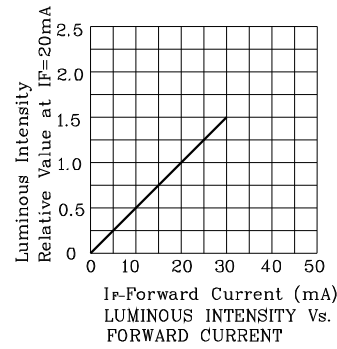
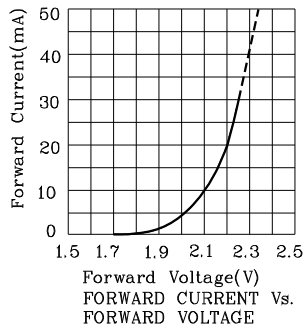
Absolute Maximum Ratings (TA=25°C)		M2ACR (AlInGaP)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	150	mA
Power Dissipation	P <sub>T</sub>	84	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	

Operating Characteristics (TA=25°C)		M2ACR (AlInGaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	2.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	2.8	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	10	uA
Wavelength Of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λ <sub>P</sub>	640	nm
Wavelength Of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λ <sub>D</sub>	630	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	25	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	27	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd	Wavelength nm λ <sub>P</sub>	Viewing Angle 2θ 1/2
				min.	typ.	
XZM2ACR79W	Red	AlInGaP	Water Clear	1200	1990	60° (H) 35° (V)

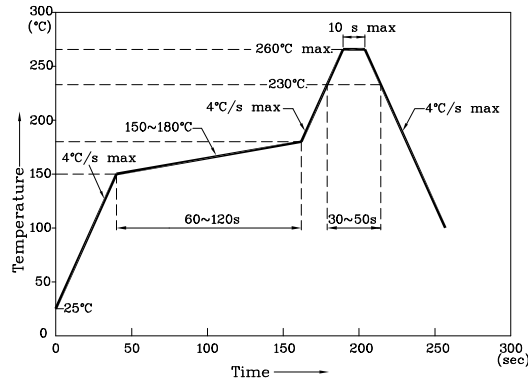


❖ M2ACR



**Reflow soldering is recommended and the soldering profile is shown below.  
Other soldering methods are not recommended as they might cause damage to the product.**

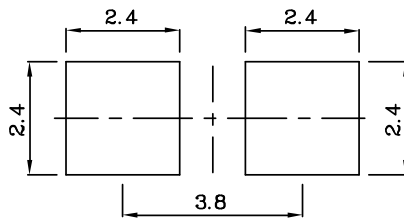
Reflow Soldering Profile For Lead-free SMT Process.



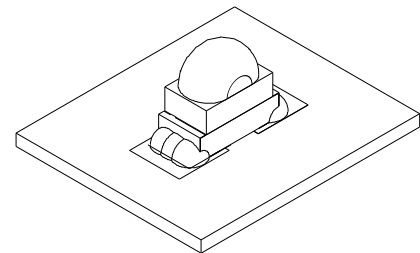
NOTES:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

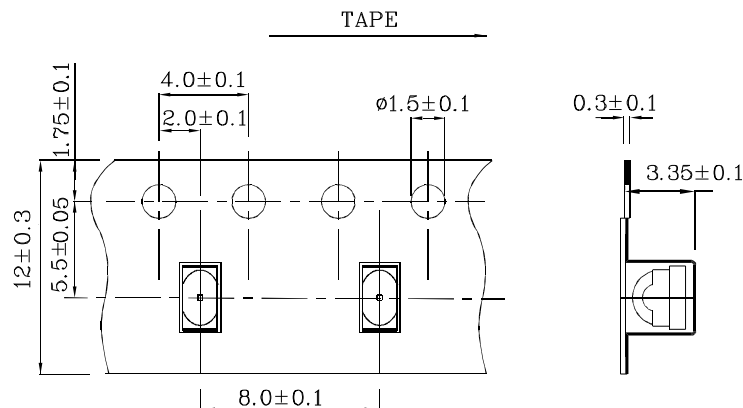
❖ **Recommended Soldering Pattern**  
(Units: mm ; Tolerance: ± 0.1)



**The device has a single mounting surface.  
The device must be mounted according to the specifications.**



❖ **Tape Specification (Units : mm)**



Remarks:

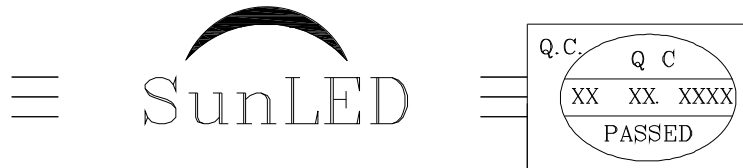
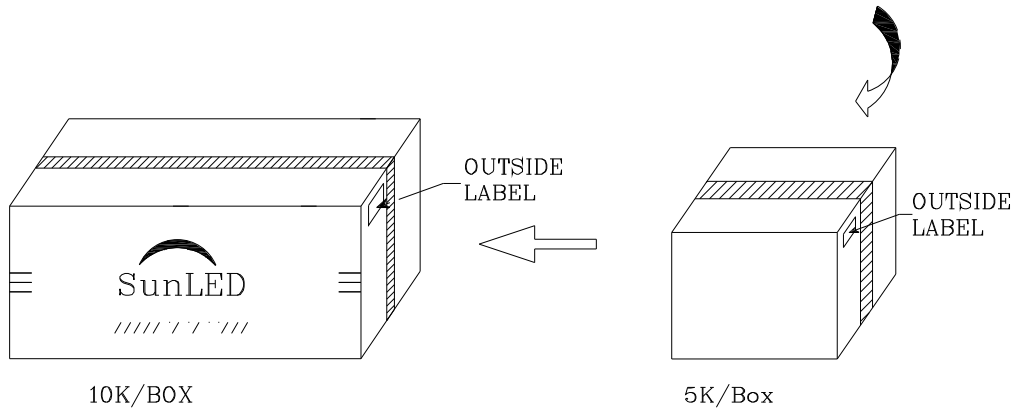
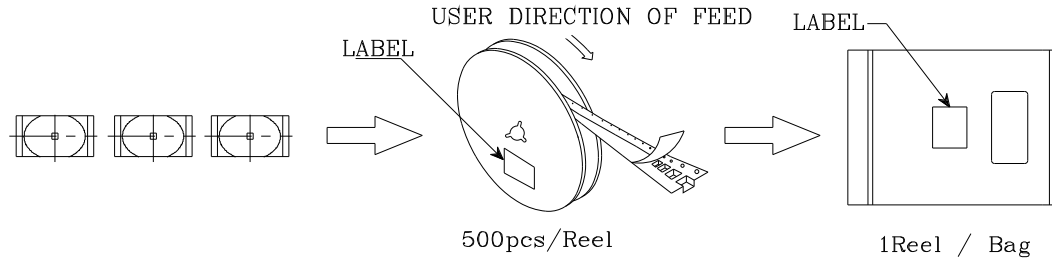
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:


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**

**XZM2ACR79W**



P/NO : XZxxx79x	
QTY : 500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 XXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	