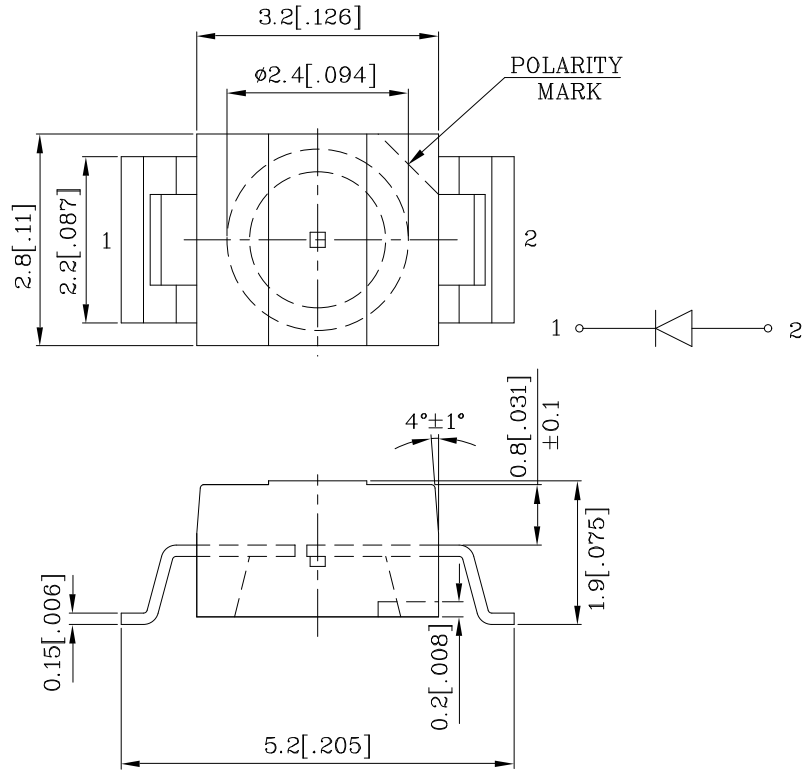




PRELIMINARY SPEC

Features

- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package : 1500pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.



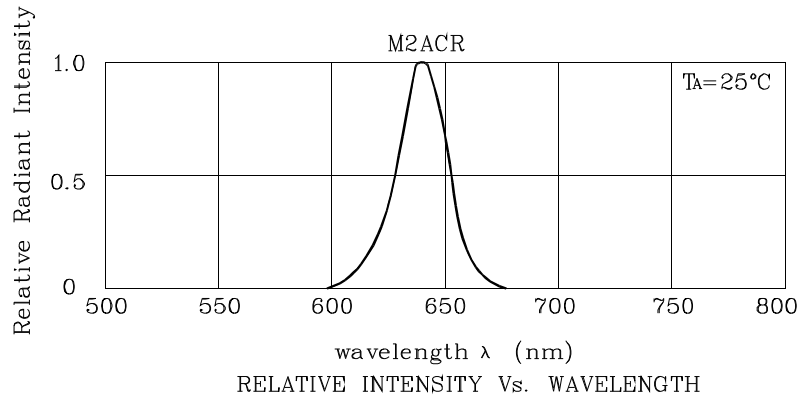
Notes:

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.

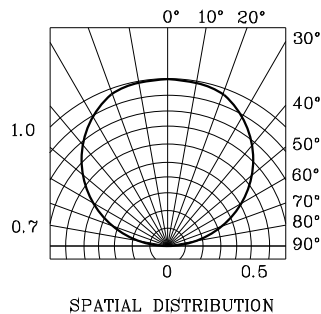
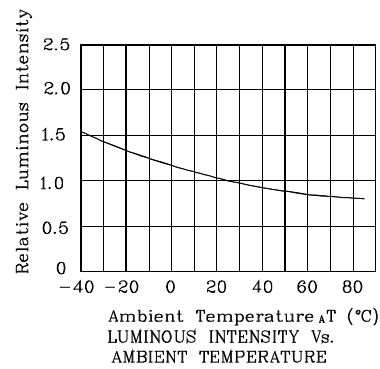
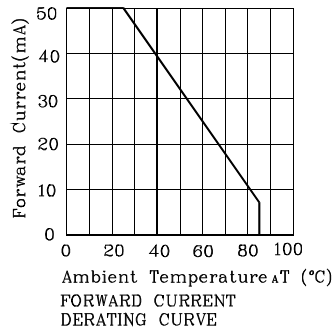
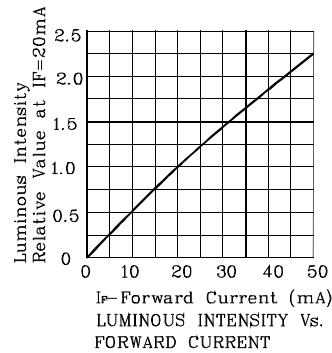
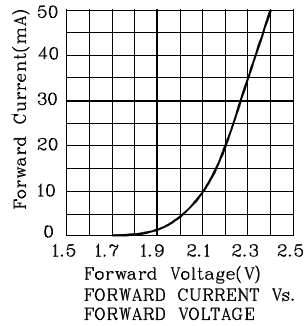
Absolute Maximum Ratings (TA=25°C)		M2ACR (AlInGaP)	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	50	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	150	mA
Power Dissipation	P _T	140	mW
Operating Temperature	T _A	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	

Operating Characteristics (TA=25°C)		M2ACR (AlInGaP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	2.2	V
Forward Voltage (Max.) (I _F =20mA)	V _F	2.8	V
Reverse Current (Max.) (V _R =5V)	I _R	10	uA
Wavelength of Peak Emission (Typ.) (I _F =20mA)	λ _P	640	nm
Wavelength of Dominant Emission (Typ.) (I _F =20mA)	λ _D	630	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	25	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	27	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I _F =20mA) mcd		Wavelength nm λ _P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZM2ACR45FW-9	Red	AlInGaP	Water Clear	650	1495	640	120°
Published Date : JAN 09, 2009				Drawing No : XDSB2761		V1 Checked : B.L.LIU P. 1/4	

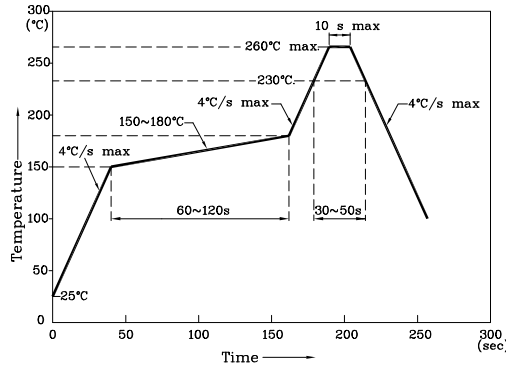


❖ M2ACR



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.

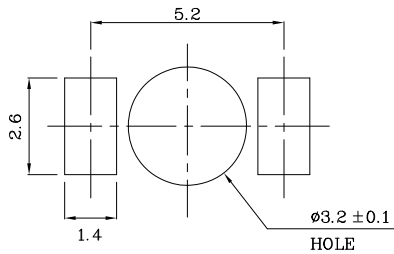
Reflow Soldering Profile For Lead-free SMT Process.



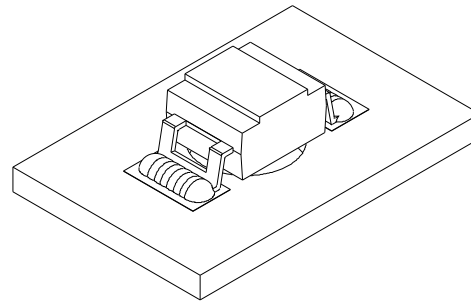
NOTES:

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.

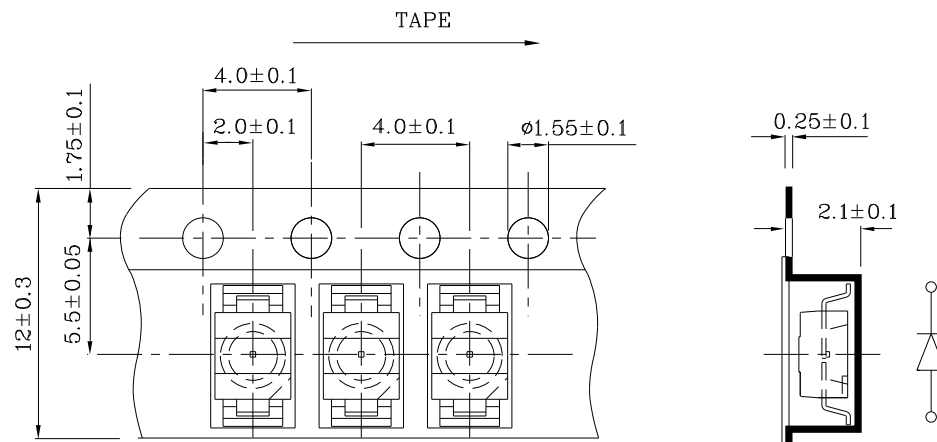
❖ **Recommended Soldering Pattern**
(Units : mm; Tolerance: ±0.1)



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



❖ **Tape Specification (Units : mm)**



Remarks:

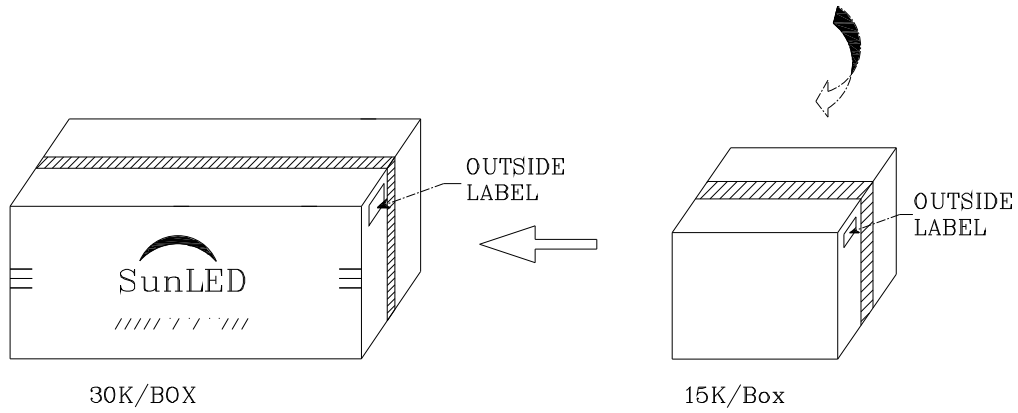
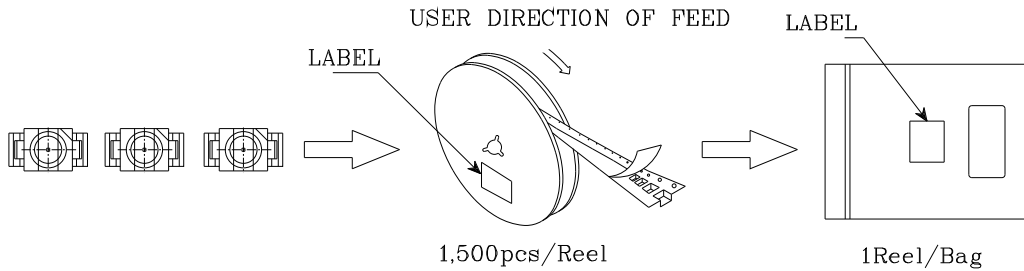

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:


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

XZM2ACR45FW-9

	Q.C. Q C XX XX XXX PASSED
P/NO : XZxx45x9	
QTY : 1,500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 XXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	