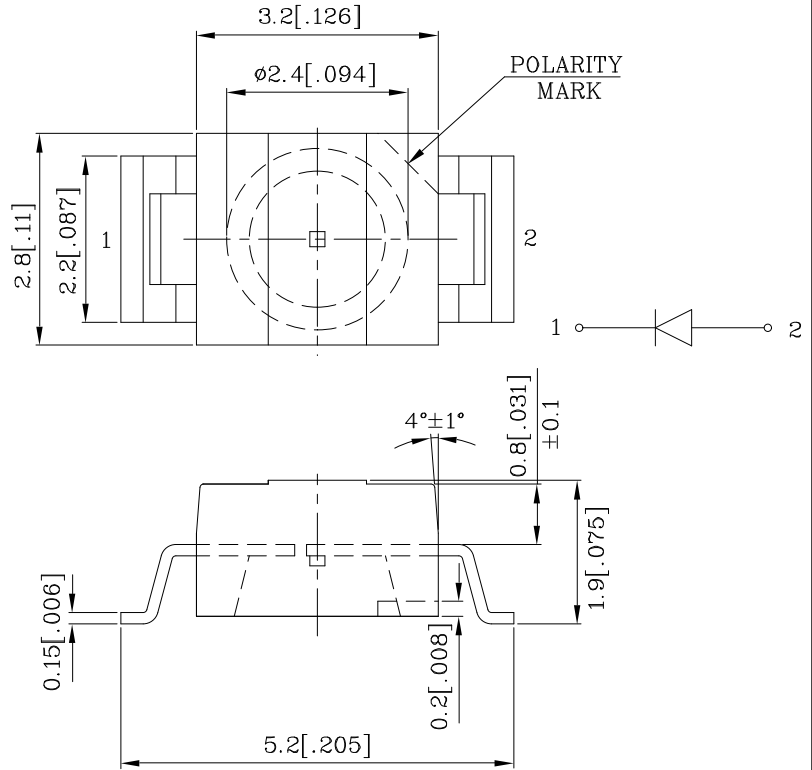


PRELIMINARY SPEC

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.



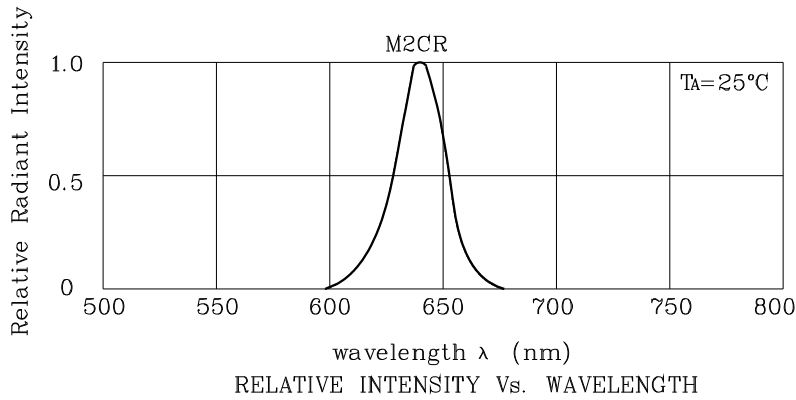
Notes:

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

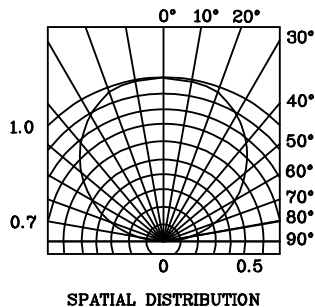
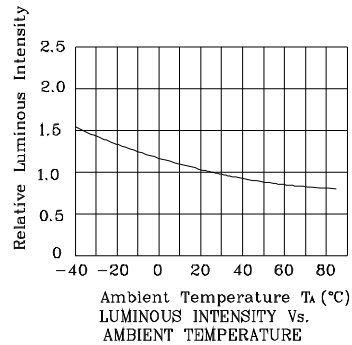
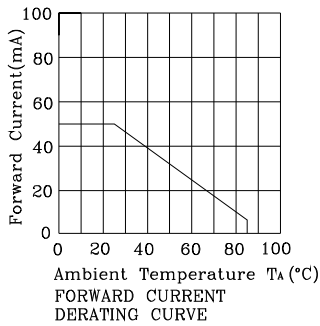
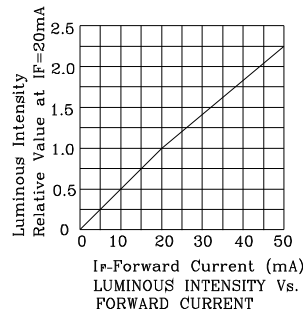
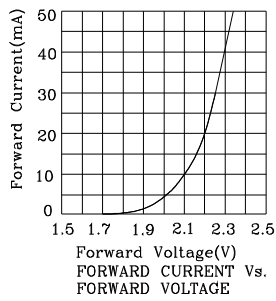
Absolute Maximum Ratings (TA=25°C)		M2CR (AlInGaP)	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	50	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	150	mA
Power Dissipation	P _T	140	mW
Operating Temperature	T _A	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	

Operating Characteristics (TA=25°C)		M2CR (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

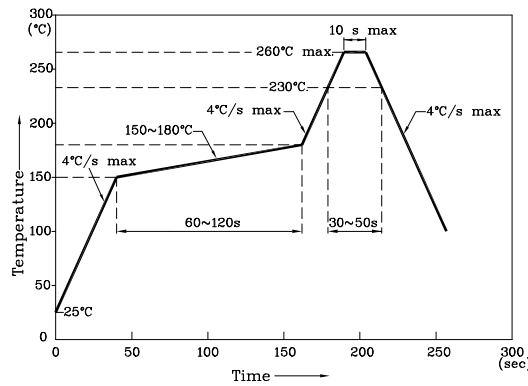
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I _F =20mA) mcd		Wavelength nm λ _P	Viewing Angle 2 θ 1/2
				min.	typ.		
ZM2CR45FW-9	Red	AlInGaP	Water Clear	650	1495	640	120°



❖ M2CR

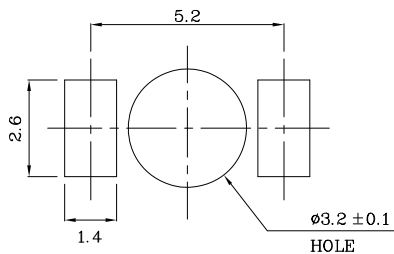


Reflow Soldering Profile For Lead-free SMT Process.

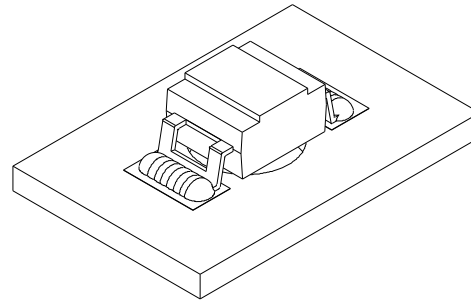


- NOTES:
1. Maximum soldering temperature should not exceed 260°C.
 2. Recommended reflow temperature: 145°C-260°C.
 3. Do not put stress to the epoxy resin during high temperatures conditions.

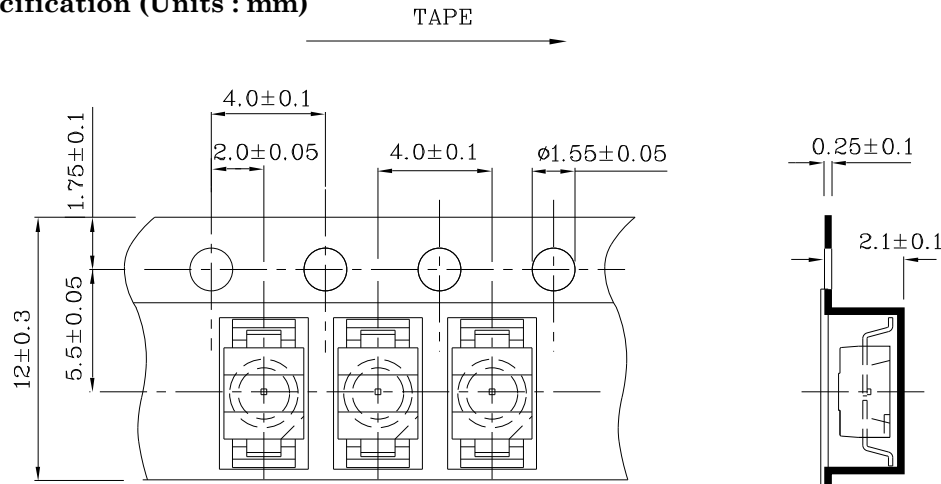
❖ **Recommended Soldering Pattern**
 (Units : mm; Tolerance: ±0.1)



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



❖ **Tape Specification (Units : mm)**



Remarks:

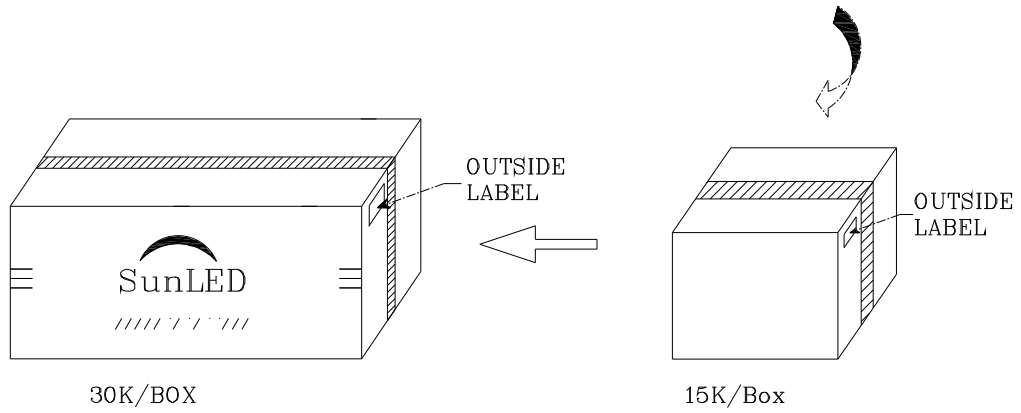
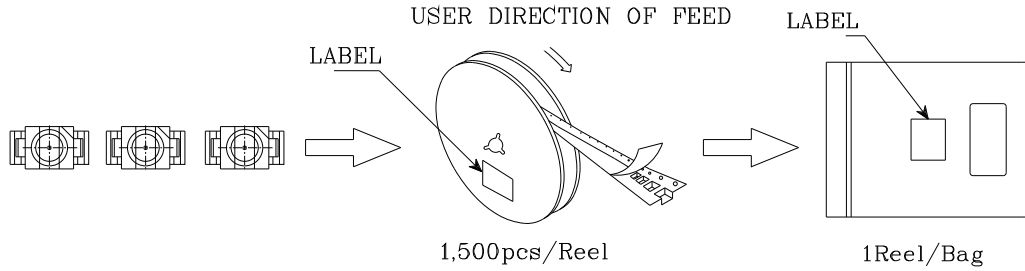

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

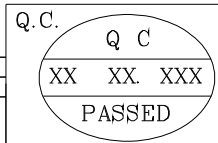

1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

ZM2CR45FW-9

	
P/NO : Zxx45x9	
QTY : 1,500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
	
<p>XXXXXXXXXXXXXXXXXXXX</p> <p>RoHS Compliant</p>	