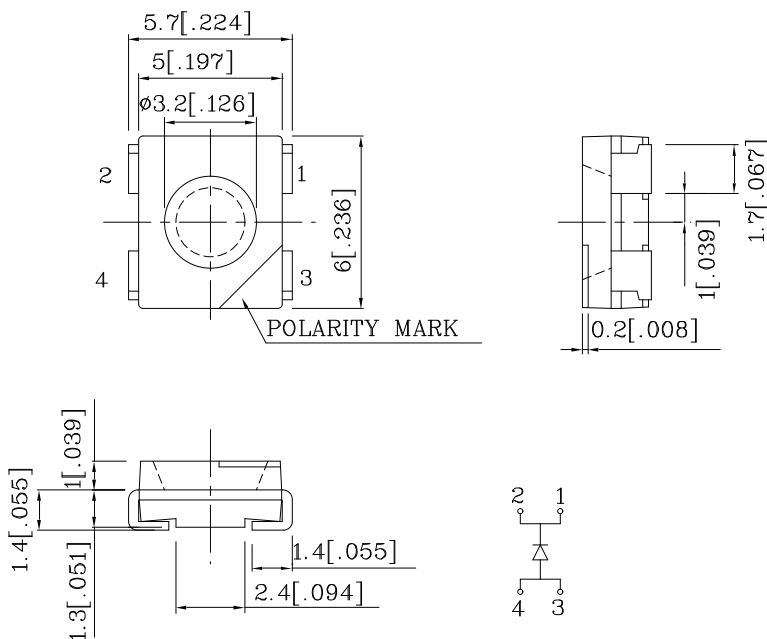


PRELIMINARY SPEC

Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE: 500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



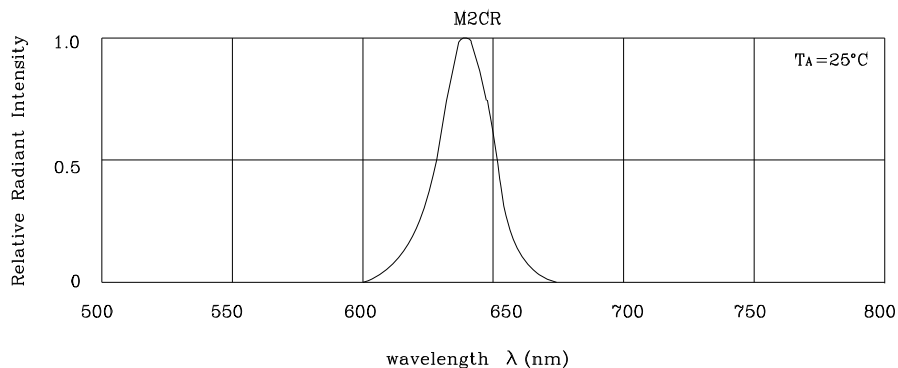
Notes:

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 (T _A =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	

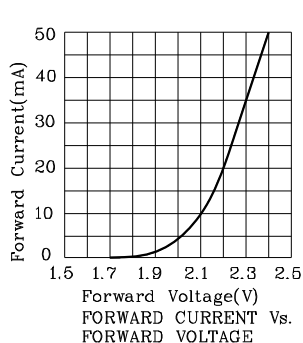
Operating Characteristics (T _A =25°C)		M2CR (AlInGaP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	2.2	V
Forward Voltage (Max.) (I _F =20mA)	V _F	2.8	V
Reverse Current (Max.) (V _R =5V)	I _R	10	uA
Wavelength of Peak Emission (Typ.) (I _F =20mA)	λ P	640	nm
Wavelength of Dominant Emission (Typ.) (I _F =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 (IF=50mA) mcd	Wavelength nm λ P	Viewing Angle 2 θ 1/2	
				min.	typ.		
ZM2CR82W	Red	AlInGaP	Water Clear	3300	4490	640	100°
Published Date : FEB 27,2008		Drawing No : SDSA6405		V1	Checked : B.L.LIU		P.1/4

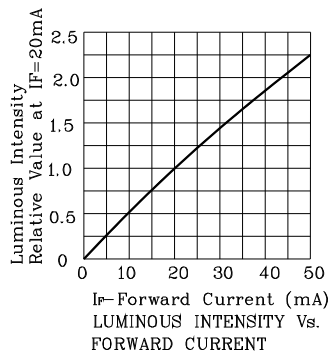


RELATIVE INTENSITY Vs. WAVELENGTH

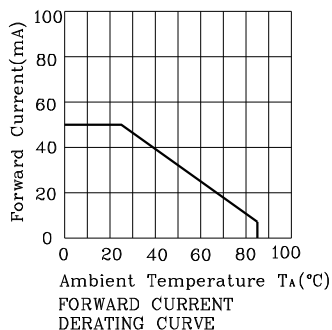
❖ M2CR



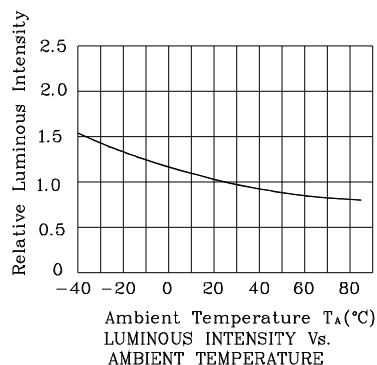
FORWARD CURRENT Vs. FORWARD VOLTAGE



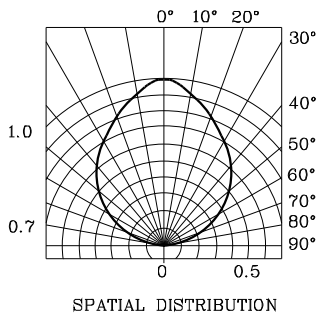
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE

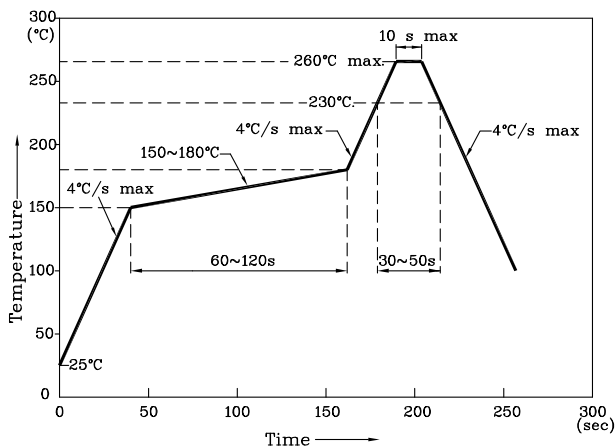


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

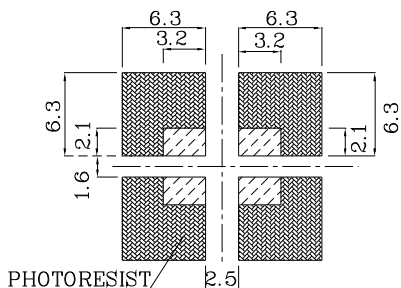
Reflow Soldering Profile For Lead-free SMT Process.



NOTES:

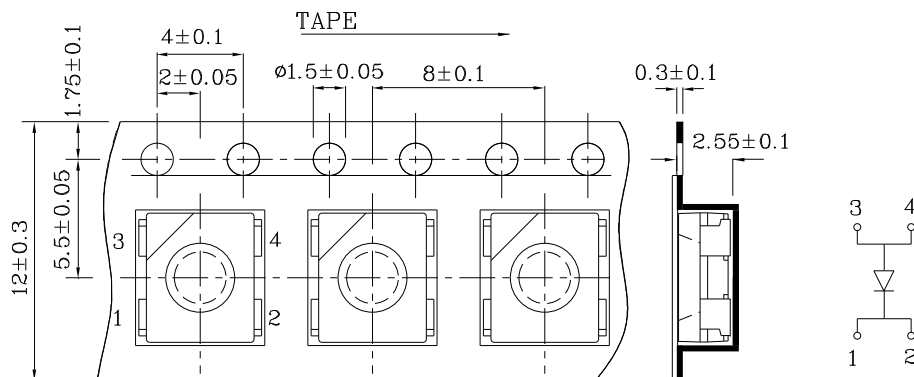
1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C–260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

❖ **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:

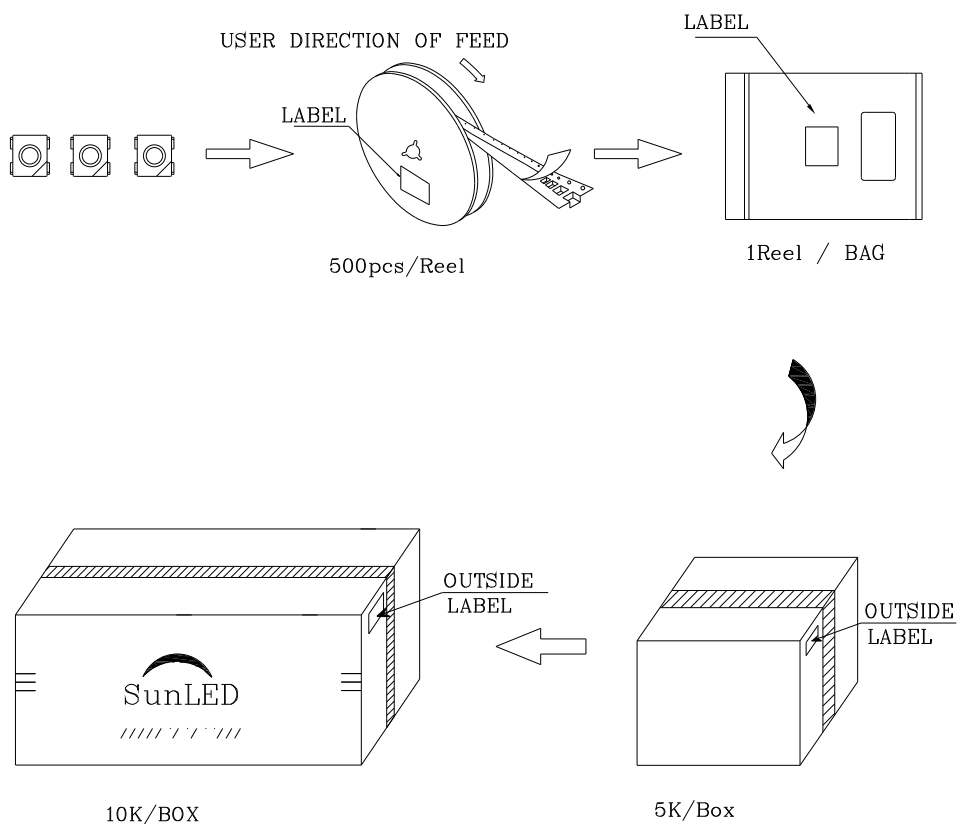
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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

ZM2CR82W



≡ **SunLED** ≡

P/NO : Zxx82x	
QTY : 500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 XXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	

Q.C

Q C

XX XX XXXX

PASSED