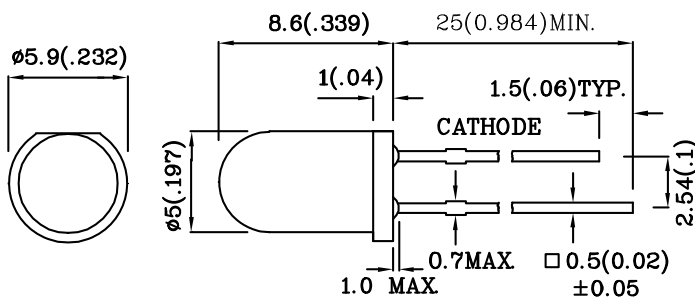


PRELIMINARY SPEC

Features

- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- I.C.COMPATIBLE/LOW CURRENT CAPABILITY.
- RoHS COMPLIANT.



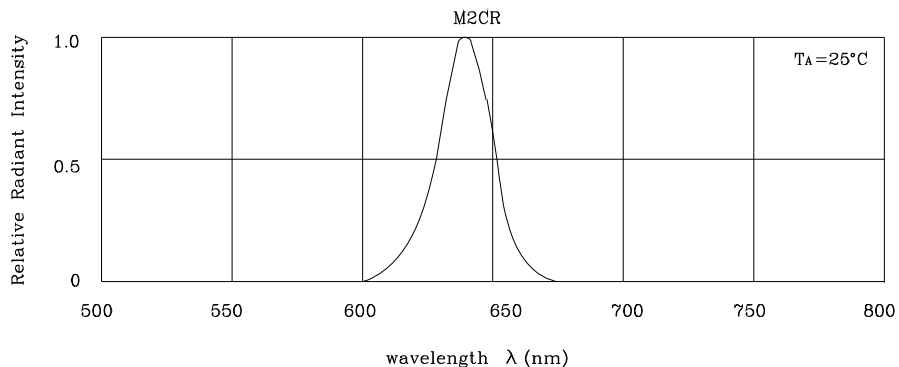
Notes:

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)		M2CR (AlInGaP)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	150	mA
Power Dissipation	PT	84	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds		
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds		

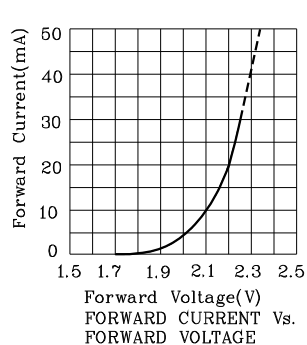
Operating Characteristics (T _A =25°C)		M2CR (AlInGaP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	2.2	V
Forward Voltage (Max.) (I _F =20mA)	V _F	2.8	V
Reverse Current (Max.) (V _R =5V)	I _R	10	uA
Wavelength Of Peak Emission (Typ.) (I _F =20mA)	λ P	640	nm
Wavelength Of Dominant Emission (Typ.) (I _F =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=20mA) mcd	Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.	
XLM2CR14W	Red	AlInGaP	Water Clear	3300	6990	640 30°
Published Date : JAN 12 2008		Drawing No : XDSB1246		V2	Checked : B.L.LIU	P.1/4

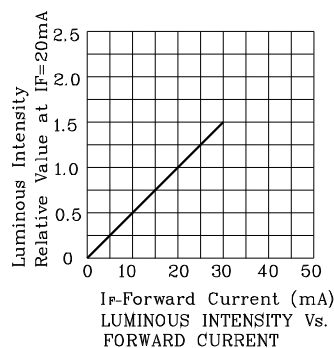


RELATIVE INTENSITY Vs. WAVELENGTH

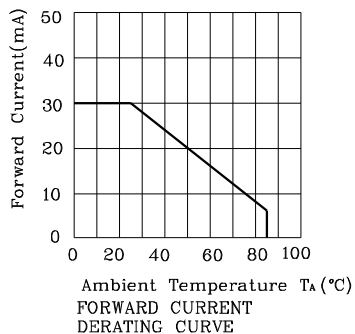
❖ M2CR



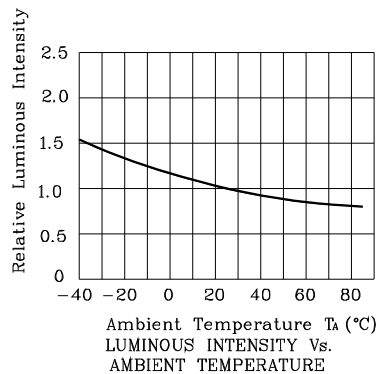
FORWARD CURRENT Vs. FORWARD VOLTAGE



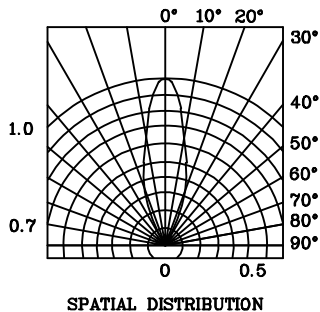
LUMINOUS INTENSITY Vs. FORWARD CURRENT



DERATING CURVE

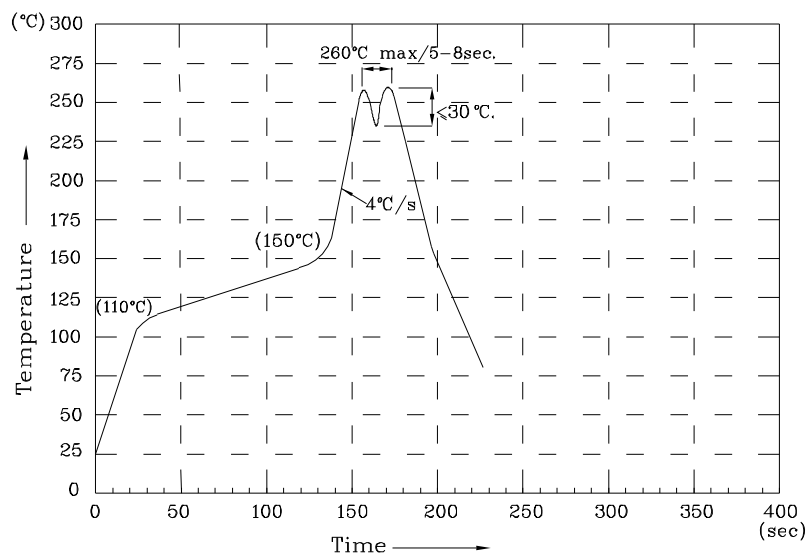


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

- 1.Recommend the wave temperature 245°C~260°C.The maximum soldering temperature should be less than 260°C.
- 2.Do not apply stress on epoxy resins when temperature is over 85 degree°C.
- 3.The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
- 4.No more than once.

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:

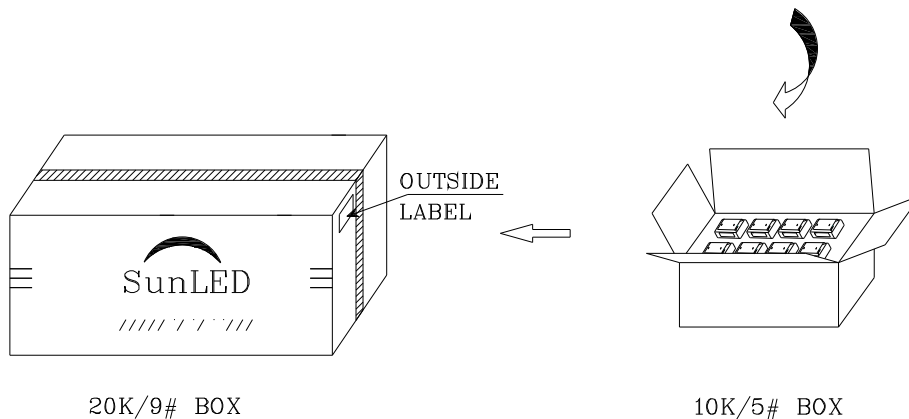
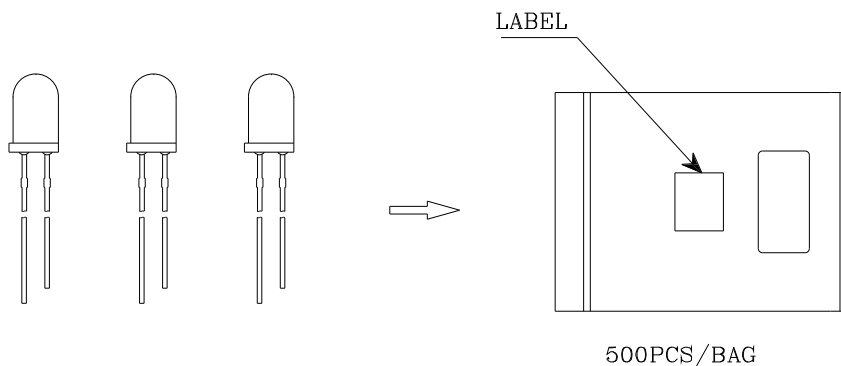
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS

XLM2CR14W





Q.C.

Q	C
XX	XX XXXX
PASSED	

P/NO : XLxxx14x	
QTY : 500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 XXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	