

Part Number: ZM2CR96W

3.5x2.7mm SURFACE MOUNT LED LAMP

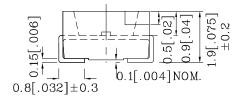
PRELIMINARY SPEC

Features

- •SINGLE COLOR.
- •SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- •AVAILABLE ON TAPE AND REEL.
- •IDEAL FOR BACKLIGHTING.
- $\bullet {\rm PACKAGE}:1500 {\rm PCS} \, / \, {\rm REEL}.$
- •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)		M2CR (AlInGaP)	Unit	
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Current	IF	50	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	150	mA	
Power Dissipation	Рт	160	mW	
Operating Temperature	TA	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

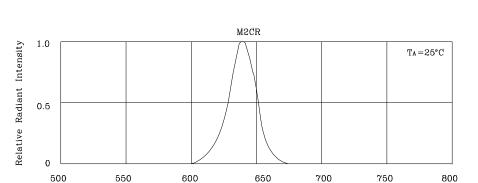
Operating Characteristic (TA=25°C)	M2CR (AlInGaP)	Unit	
Forward Voltage (Typ.) (IF=50mA)	$V_{\rm F}$	2.5	V
Forward Voltage (Max.) (IF=50mA)	$V_{\rm F}$	3.2	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength Of Peak Emission (Typ.) (IF=50mA)	λΡ	640	nm
Wavelength Of Dominant Emission (Typ.) (IF=50mA)	λ D	630	nm
Spectral Line Full Width At Half-Maximum (Typ) (IF=50mA)	Δλ	25	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	С	27	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=50mA) mcd		Wavelength nm λ P	Viewing Angle 2 0 1/2
				min.	typ.		
ZM2CR96W	Red	AlInGaP	Water Clear	3300	4490	640	120°
Published Date : JA	N 17, 2008	Drawing	g No : SDSA6121	V1	Check	ed : B.L.LIU	P. 1/4



Part Number: ZM2CR96W

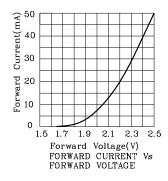
3.5x2.7mm SURFACE MOUNT LED LAMP

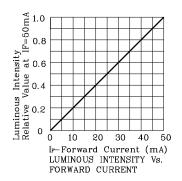


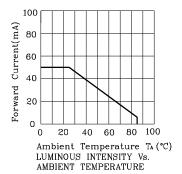
wavelength λ (nm)

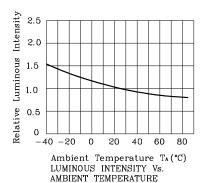
RELATIVE INTENSITY Vs. WAVELENGTH

❖ M2CR









0° 10° 20° 40° 50° 60° 70° 80° 90°

SPATIAL DISTRIBUTION

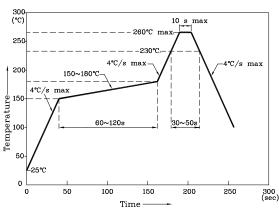
Published Date : JAN 17, 2008 Drawing No : SDSA6121 V1 Checked : B.L.LIU P. 2/4



Part Number: ZM2CR96W

3.5x2.7mm SURFACE MOUNT LED LAMP

Reflow Soldering Profile For Lead-free SMT Process.

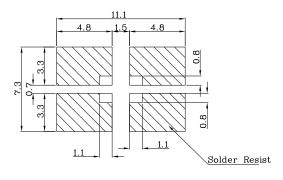


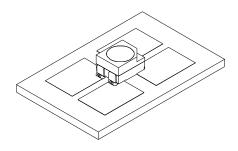
NOTES:

- 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.

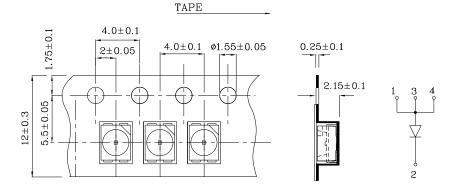
❖ Recommended Soldering Pattern (Units: mm; Tolerance: ±0.1)

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





* Tape Specification (Units:mm)



Romarke.

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: \pm -0.1V

Note: Accuracy may depend on the sorting parameters.

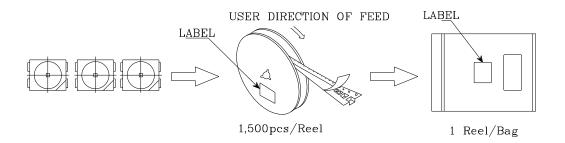


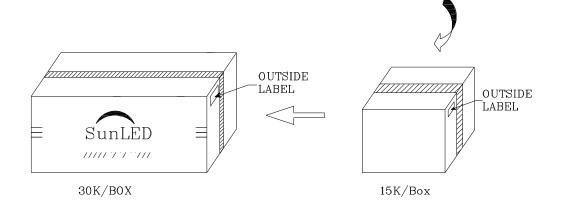
Part Number: ZM2CR96W

3.5x2.7mm SURFACE MOUNT LED LAMP

PACKING & LABEL SPECIFICATIONS

ZM2CR96W







V1 Checked: B.L.LIU Published Date: JAN 17, 2008 Drawing No: SDSA6121 P. 4/4