



3.2mmx1.6mm SMD CHIP LED LAMP

PRELIMINARY SPEC

Features

- 3.2mmx1.6mm SMT LED, 0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- $\bullet Package: 2000pcs \, / \, reel.$
- •Moisture sensitivity level : level 3.
- •RoHS compliant.

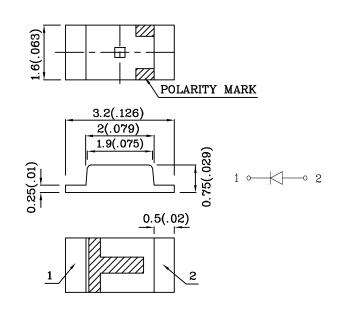




Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2(0.008")$ unless otherwise noted.
- $3. {\rm Specifications}$ are subject to change without notice.

Absolute Maximum Rating (TA=25°C)	M2ACR (AlInGaP)	Unit			
Reverse Voltage	$V_{\rm R}$	5	V		
Forward Current	IF	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	150	mA		
Power Dissipation	Рт	84	mW		
Operating Temperature	TA	-40 ~ +85	0.0		
Storage Temperature	Tstg	-40 ~ +85	°C		

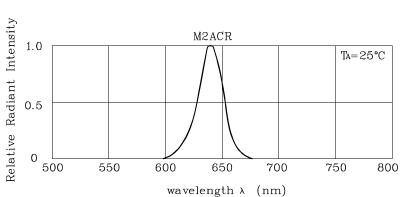


Operating Characteristic (TA=25°C)	M2ACR (AlInGaP)	Unit	
Forward Voltage (Typ.) (IF=20mA)	$V_{\rm F}$	2.2	V
Forward Voltage (Max.) (IF=20mA)	$V_{\rm F}$	2.8	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λΡ	640	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λ D	630	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	25	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	С	27	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 0 1/2
				min.	typ.		
XZM2ACR55W-1	Red	AlInGaP	Water Clear	650	995	640	120 °
Published Date : I	DEC 15, 2008	Drawin	ag No : XDSB2647	V1	Checked : l	B.L.LIU	P.1/4



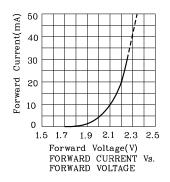
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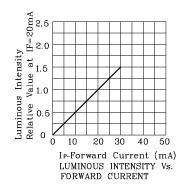


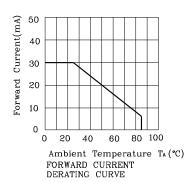
RELATIVE INTENSITY Vs. WAVELENGTH

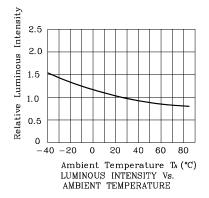
❖ M2ACR

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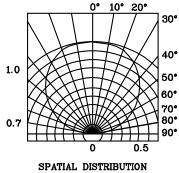








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V1

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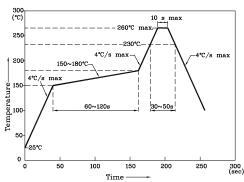
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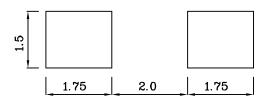
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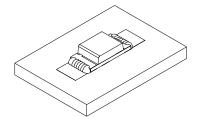
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

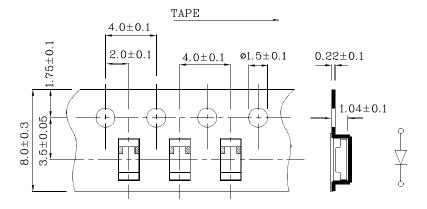


- NOTES:
 - Maximum soldering temperature should not exceed 260°c.
 - 2. Recommended reflow temperature: 145°c-260°c.
 - Do not put stress to the epoxy resin during high temperatures conditions.
- **❖** Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)
- **❖** The device has a single mounting 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.

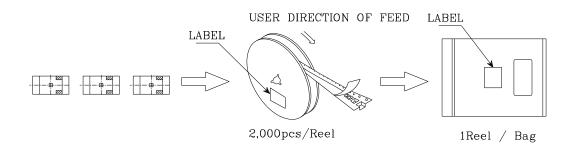
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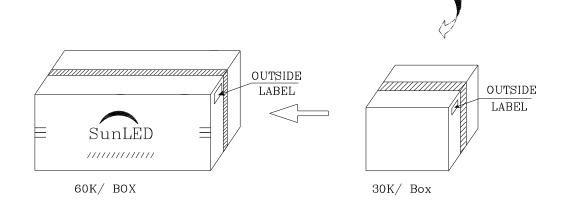


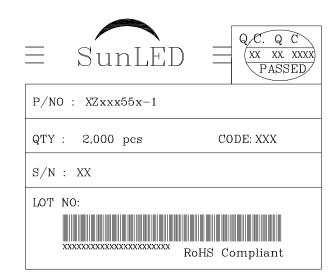
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PACKING & LABEL SPECIFICATIONS

XZM2ACR55W-1







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