



Part Number: XZM2ACY53W-1

1.6X0.8mm SMD CHIP LED LAMP

## PRELIMINARY SPEC

## **Features**

- 1.6mmx0.8mm SMT LED, 0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Moisture sensitivity level : level 3.
- ullet Package: 2000pcs / reel .
- $\bullet \mathrm{RoHS}$  compliant.

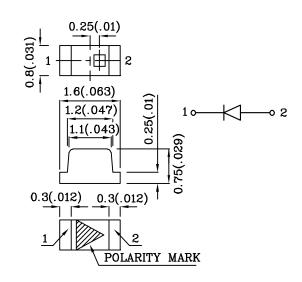




### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm$  0.1(0.004") unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Rating (TA=25°C)	M2ACY (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	140	mA		
Power Dissipation	Рт	75	mW		
Operating Temperature	TA	-40 ~ +85	°C		
Storage Temperature	Tstg	-40 ~ +85	C		

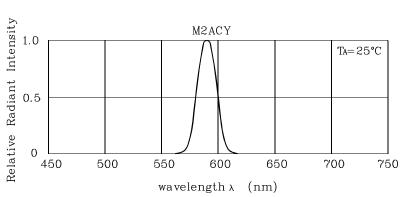


Operating Characteristic (TA=25°C)	M2ACY (AlInGaP)	Unit	
Forward Voltage (Typ.) (IF=20mA)	$V_{\rm F}$	2.0	V
Forward Voltage (Max.) (IF=20mA)	$V_{\rm F}$	2.5	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength Of Peak Emission (Typ.) (IF=20mA)	λΡ	590	nm
Wavelength Of Dominant Emission (Typ.) (IF=20mA)	λ D	589	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	20	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	С	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Inter (IF=20	Luminous Intensity (IF=20mA) mcd		Viewing Angle 2 θ 1/2
				min.	typ.		
XZM2ACY53W-1	Yellow	AlInGaP	Water Clear	110	297	590	120 °
Published Date : I	DEC 15,2008	Drawin	g No :XDSB2641	V1	Checke	d : B.L.LIU	P.1/4

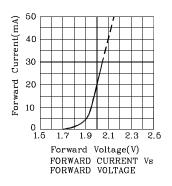


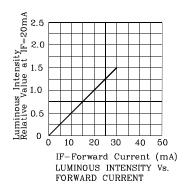
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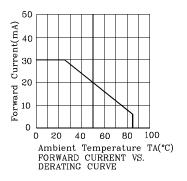


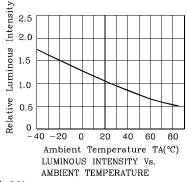
RELATIVE INTENSITY Vs. WAVELENGTH

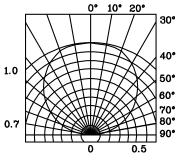
# **❖** M2ACY











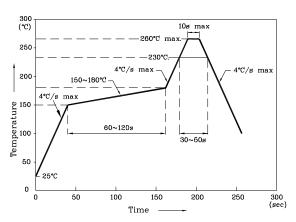
SPATIAL DISTRIBUTION



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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.

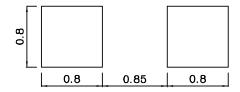


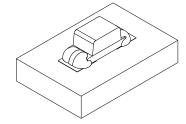
#### Notes:

- 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.

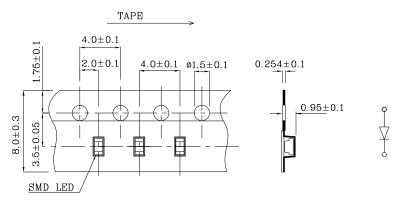
# **❖** Recommended Soldering Pattern (Units: mm;Tolerance:± 0.1)

❖ 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.

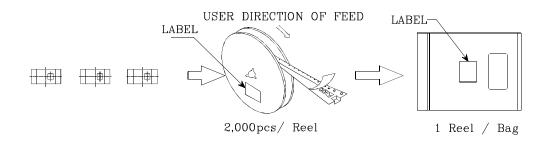


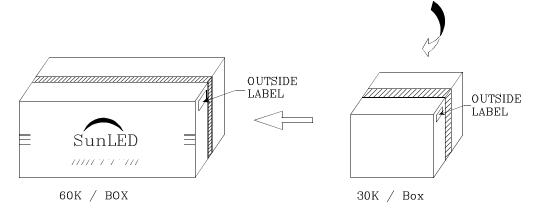
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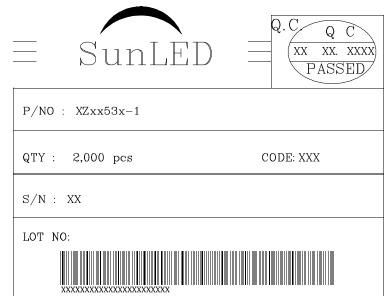
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# PACKING & LABEL SPECIFICATIONS

## XZM2ACY53W-1







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RoHS Compliant