



Part Number: XZM2ACY55W

3.2x1.6mm SMD CHIP LED LAMP

## PRELIMINARY SPEC

#### **Features**

- $\bullet$  3.2mmx1.6mm SMT LED, 1.1mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package : 2000pcs / reel.
- $\bullet$  Moisture sensitivity level : level 3.
- RoHS compliant.

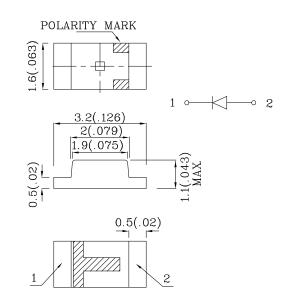




#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.
- 3. 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	-0		

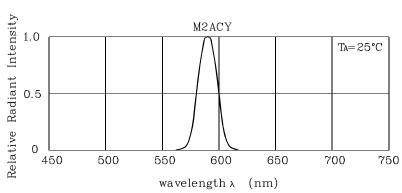


Operating Characteristic (TA=25°C)	M2ACY (AlInGaP)	Unit	
Forward Voltage (Typ.) (IF=20mA)	$V_{\rm F}$	2.0	V
Forward Voltage (Max.) (IF=20mA)	$V_{\rm F}$	2.5	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λΡ	590	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	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	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZM2ACY55W	Yellow	AlInGaP	Water Clear	110	297	590	120°
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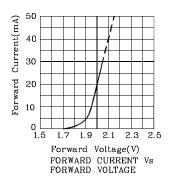


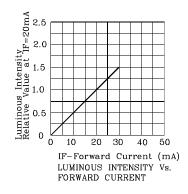


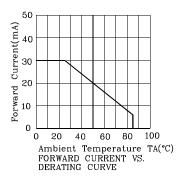


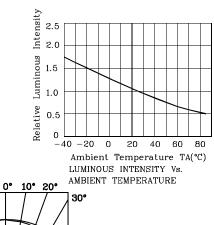
RELATIVE INTENSITY Vs. WAVELENGTH

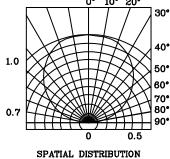
## **❖** M2ACY









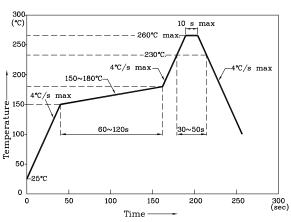


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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

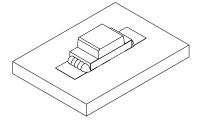
Reflow Soldering Profile For Lead-free SMT Process.



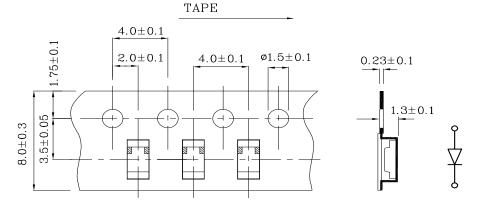
- NOTES:
  - 1. Maximum soldering temperature should not exceed 260°c.
  - 2. Recommended reflow temperature: 145°c-260°c.
  - Do not put stress to the epoxy resin during high temperatures conditions.
- **❖** Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ 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.

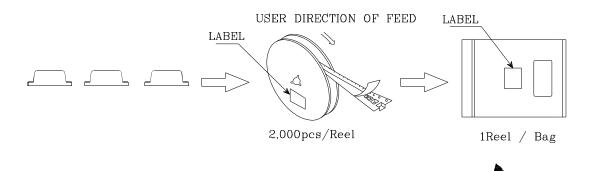


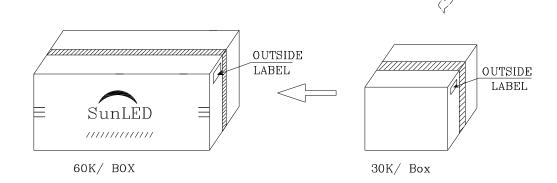
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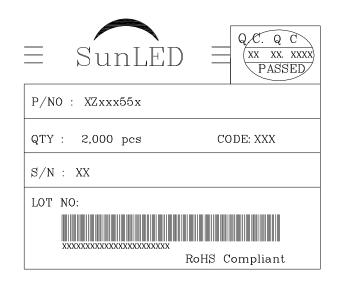
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# PACKING & LABEL SPECIFICATIONS

## XZM2ACY55W







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