



 $5.0 \times 6.0 \text{mm}$  SURFACE MOUNT LED LAMP

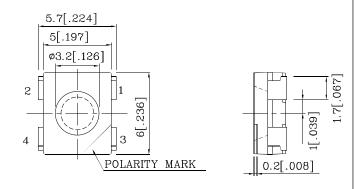
### PRELIMINARY SPEC

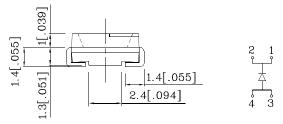
#### **Features**

- •Single color.
- •Suitable for all SMT assembly and solder process.
- •Available on tape and reel.
- •Ideal for backlighting.
- •Package: 500pcs / reel.
- •Moisture sensitivity level : level 4.
- $\bullet \mathrm{RoHS}$  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.

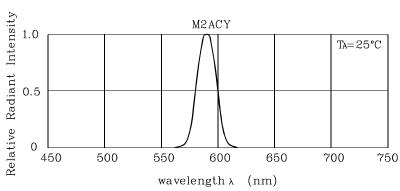
Absolute Maximum Rating (Ta=25°C)	M2ACY (AlInGaP)	Unit	
Reverse Voltage	$V_{\rm R}$	5	V
Forward Current	IF	50	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	140	mA
Power Dissipation	Рт	125	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	-0

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	Inte (IF=8	inous nsity 50mA) acd	Wavelength nm λ P	Viewing Angle 2 0 1/2
				min.	typ.		
XZM2ACY82W	Yellow	AlInGaP	Water Clear	650	1295	590	100°
Published Date : JA	AN 12,2009	Drawing	No: XDSB2807	V1	Checked:	B.L.LIU	P.1/4

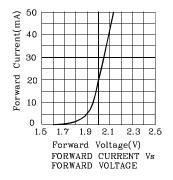


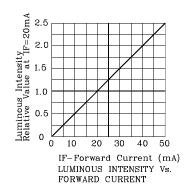
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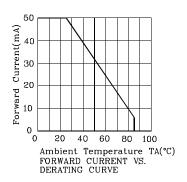


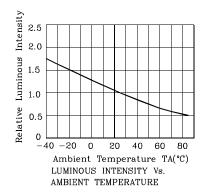
RELATIVE INTENSITY Vs. WAVELENGTH

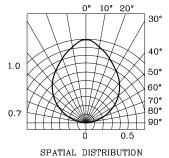
### **❖** M2ACY











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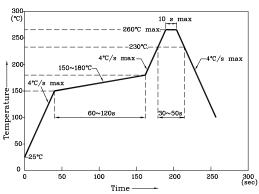




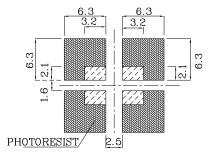
5.0X6.0mm SURFACE MOUNT LED LAMP

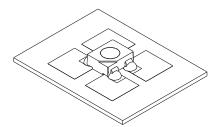
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

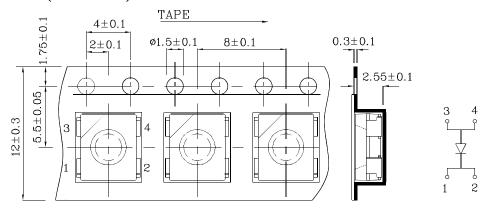


- NOTES:
  - 1. Maximum soldering temperature should not exceed 260°c.
  - 2. Recommended reflow temperature: 145°c-260°c.
  - Do not put stress to the epoxy resin during high temperatures conditions.
- **♦** Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)
- **❖** The device has a single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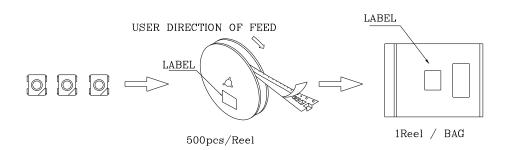


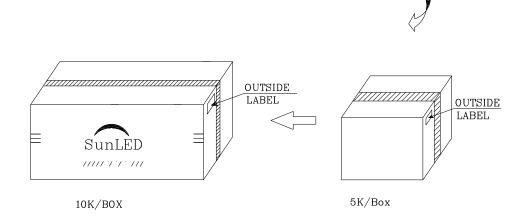


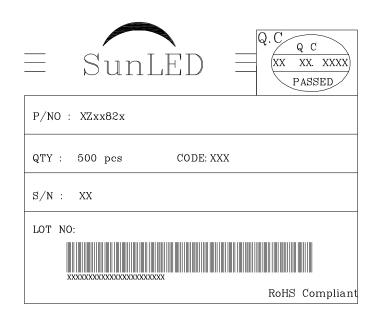
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# PACKING & LABEL SPECIFICATIONS

# XZM2ACY82W







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