

Part Number: XZM2ACY50FW

3.0x2.0mm SURFACE MOUNT LED LAMP

PRELIMINARY SPEC

Features

- 3.0mm x 2.0mm, 1.4mm high, only minimum
- Space required.
- Suitable for compact optoelectronic applications.
- \bullet Low power consumption.
- Package : 2000pcs / reel.
- $\bullet\,$ 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.
- $3. \ {\rm Specifications}$ are subject to change without notice.

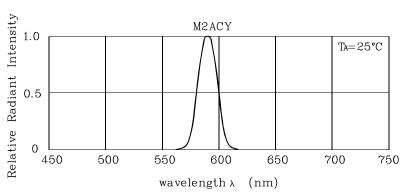
Absolute Maximum Rating (TA=25°C)	M2ACY (AlInGaP)	Unit		
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Current	IF	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	140	mA	
Power Dissipation	Рт	75	mW	
Operating Temperature	TA	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

3[.118] POLARITY MARK 2.7[.106] 2[.079] 1	
0.15[.006] 0.1[.004] NOM 0.8[.031]	1
0.6[.024]	
0.45[.018] 0.45[.018]	

Operating Characteristics (Ta=25°C)		M2ACY (AlInGaP)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	2.0	V
Forward Voltage (Max.) (IF=20mA)	VF	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

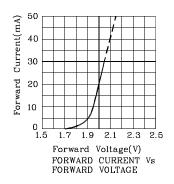
Part Number	Emitting Color	Emitting Material	Lens-c	olor	Luminous Intensity (IF=20mA) mcd		Viewing Angle 2 θ 1/2
					min.	typ.	
XZM2ACY50FW	Yellow	AlInGaP	Water (llear	180	497	90°
Published Date : DEC	17, 2008	Drawing No : XD	OSB2654	V1	Checked	: B.L.LIU	P.1/4

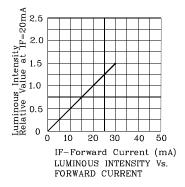


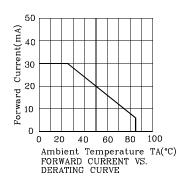


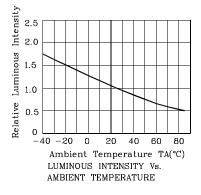
RELATIVE INTENSITY Vs. WAVELENGTH

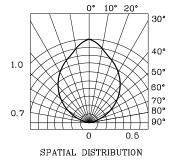
❖ M2ACY











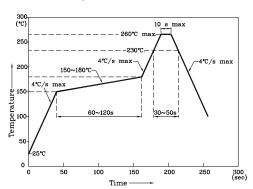
Published Date: DEC 17, 2008 Drawing No: XDSB2654 V1 Checked: B.L.LIUP.2/4



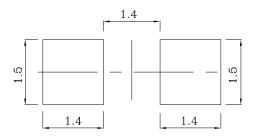
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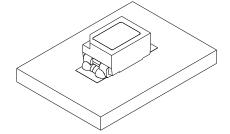
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

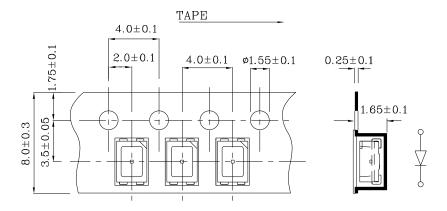


- NOTES:
 - Maximum soldering temperature should not exceed 260°c.
 - 2. Recommended reflow temperature: 145°c-260°c.
 - 3. Do not put stress to the epoxy resin during high temperatures conditions.
- ❖ Recommended Soldering Pattern (Units: mm; Tolerance: ±0.1)
- **❖** The device has a single mounting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

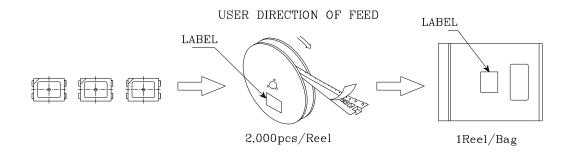
Note: Accuracy may depend on the sorting parameters.

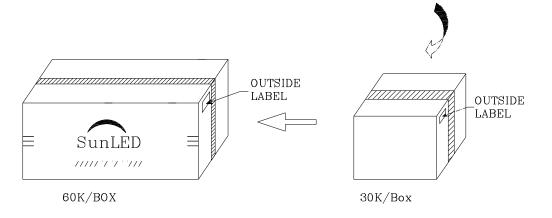
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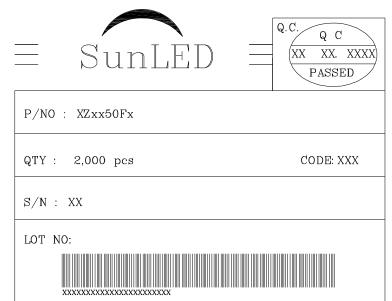


PACKING & LABEL SPECIFICATIONS

XZM2ACY50FW







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RoHS Compliant