SunLED
www.SunLEDusa.com

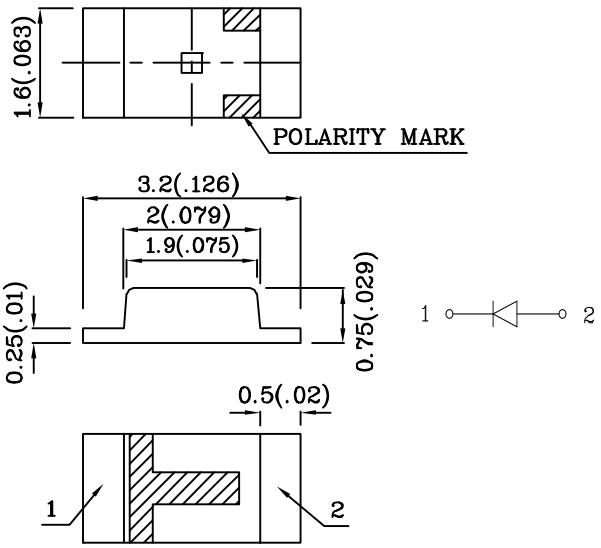
Part Number: **XZM2ACY55W-1**

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.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.



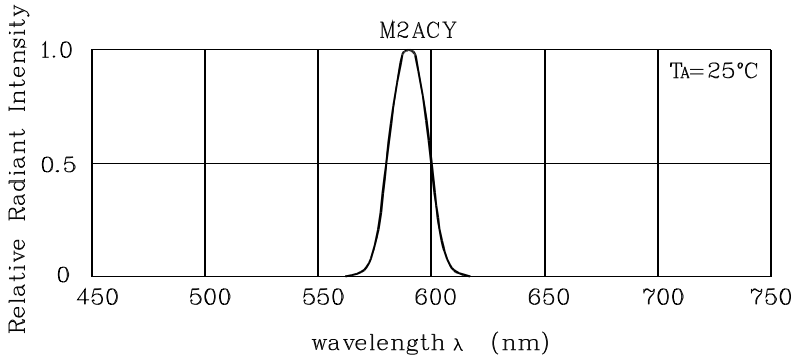
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.2(0.008") unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T_A=25°C)		**M2ACY (AlInGaP)**	**Unit**
Reverse Voltage	V_R	5	V
Forward Current	I_F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	140	mA
Power Dissipation	P_T	75	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	

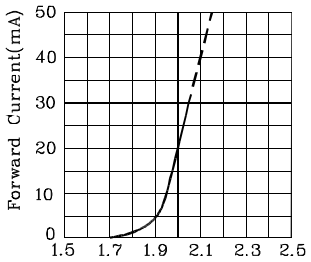
Operating Characteristics (T_A=25°C)		**M2ACY (AlInGaP)**	**Unit**
Forward Voltage (Typ.) (I_F=20mA)	V_F	2.0	V
Forward Voltage (Max.) (I_F=20mA)	V_F	2.5	V
Reverse Current (Max.) (V_R=5V)	I_R	10	uA
Wavelength Of Peak Emission (Typ.) (I_F=20mA)	λ P	590	nm
Wavelength Of Dominant Emission (Typ.) (I_F=20mA)	λ D	589	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I_F=20mA)	Δλ	20	nm
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	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-1	Yellow	AlInGaP	Water Clear	110	297	590	120 °

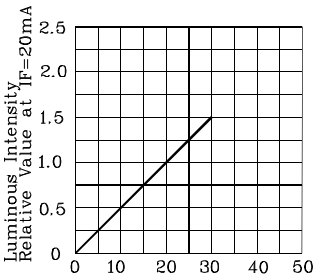


RELATIVE INTENSITY Vs. WAVELENGTH

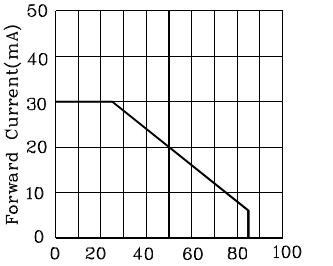
❖ **M2ACY**



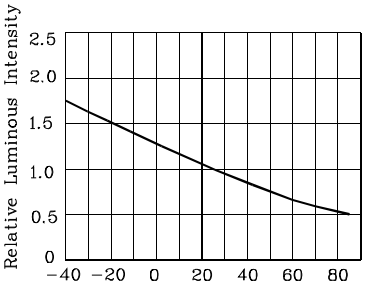
FORWARD CURRENT Vs
FORWARD VOLTAGE



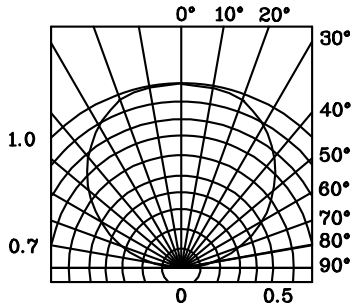
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT VS.
DERATING CURVE



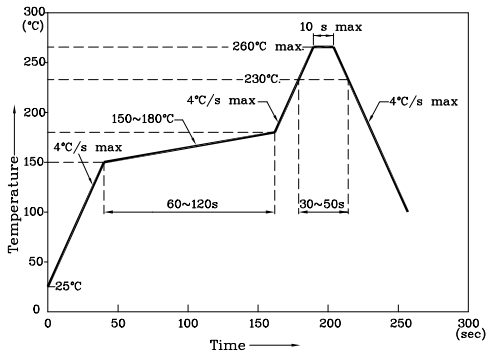
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

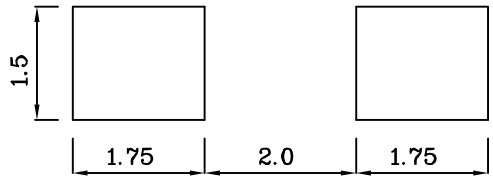
Reflow soldering is recommended and the soldering profile is shown below.
Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

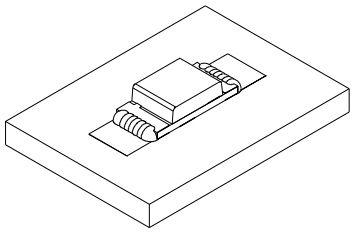


NOTES:
1. Maximum soldering temperature should not exceed 260°c.
2. Recommended reflow temperature: 145°c-260°c.
3. Do not put stress to the epoxy resin during high temperatures conditions.

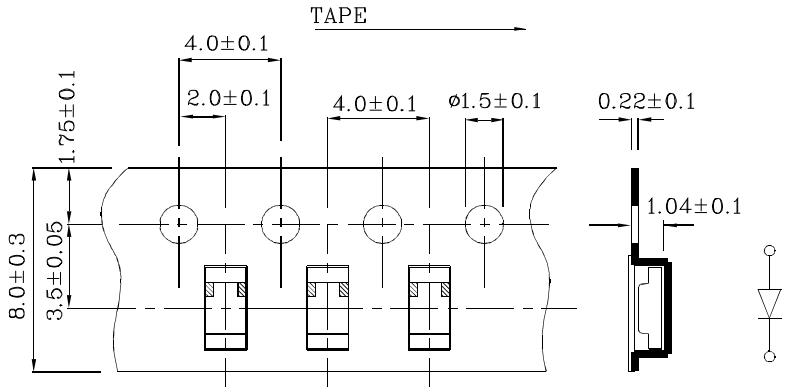
❖ **Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)**



❖ **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.

PACKING & LABEL SPECIFICATIONS XZM2ACY55W-1