

Part Number: **ZM2CY53W-1**
1.6X0.8mm SMD CHIP LED LAMP

PRELIMINARY SPEC

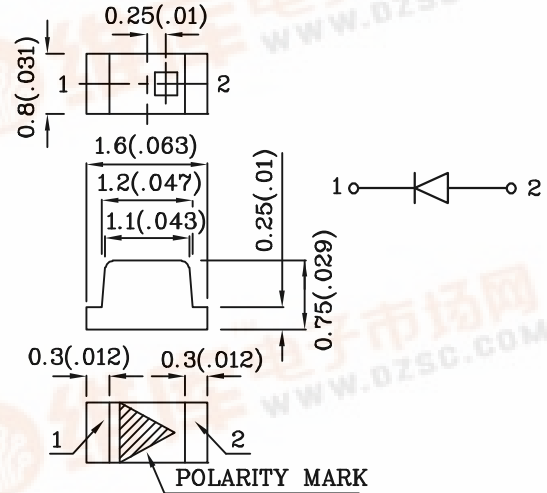
Features

- 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.
- PACKAGE: 2000PCS / REEL .
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- 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 ratings (TA=25°C)		M2CY (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	84	mW
Operating Temperature	T _A	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	

Operating Characteristics (TA=25°C)		M2CY (AlInGaP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	2.3	V
Forward Voltage (Max.) (I _F =20mA)	V _F	2.8	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 (I _F =20mA) mcd	Wavelength nm λ _P	Viewing Angle 2 θ 1/2
				min.	typ.	

ZM2CY53W-1

Yellow

AlInGaP

Water Clear

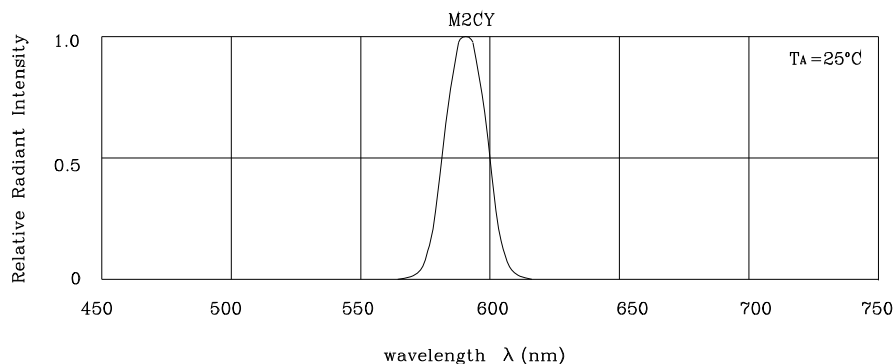
110

297

590

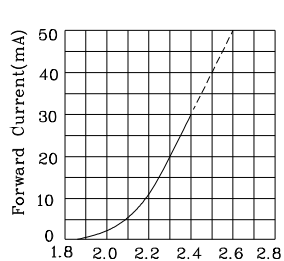
120°



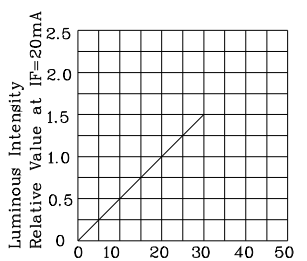


RELATIVE INTENSITY Vs. WAVELENGTH

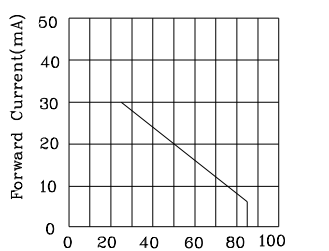
❖ M2CY



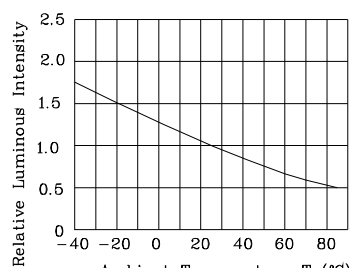
FORWARD CURRENT Vs.
FORWARD VOLTAGE



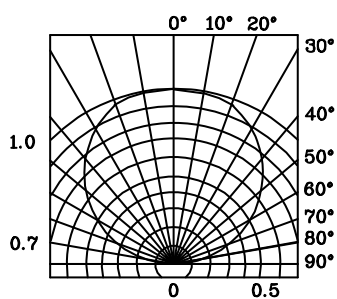
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE

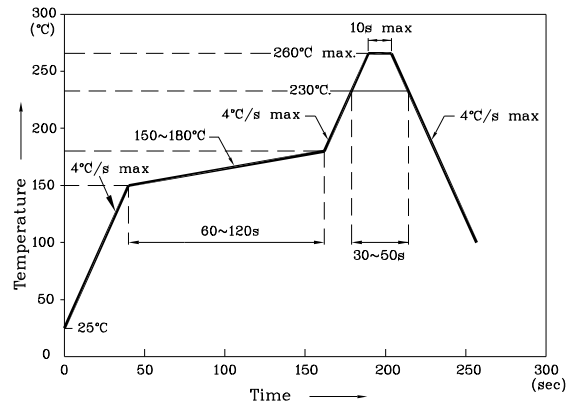


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

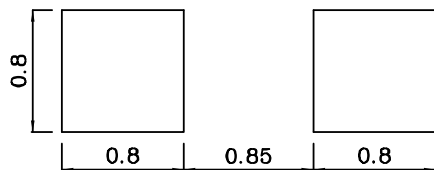
Reflow Soldering Profile For Lead-free SMT Process.



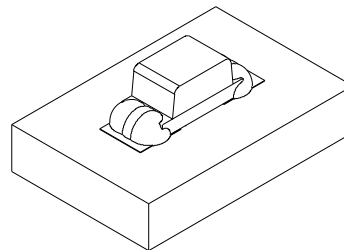
Notes:

- 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.

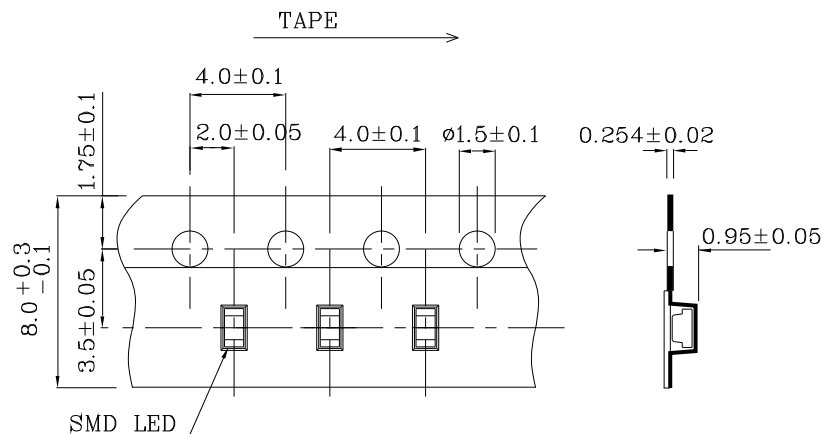
❖ Recommended Soldering Pattern
(Units : mm;Tolerance:± 0.1)



❖ The device has a single mounting surface. The device must be mounted according to the specifications.



❖ Tape Specification (Units : mm)



Remarks:

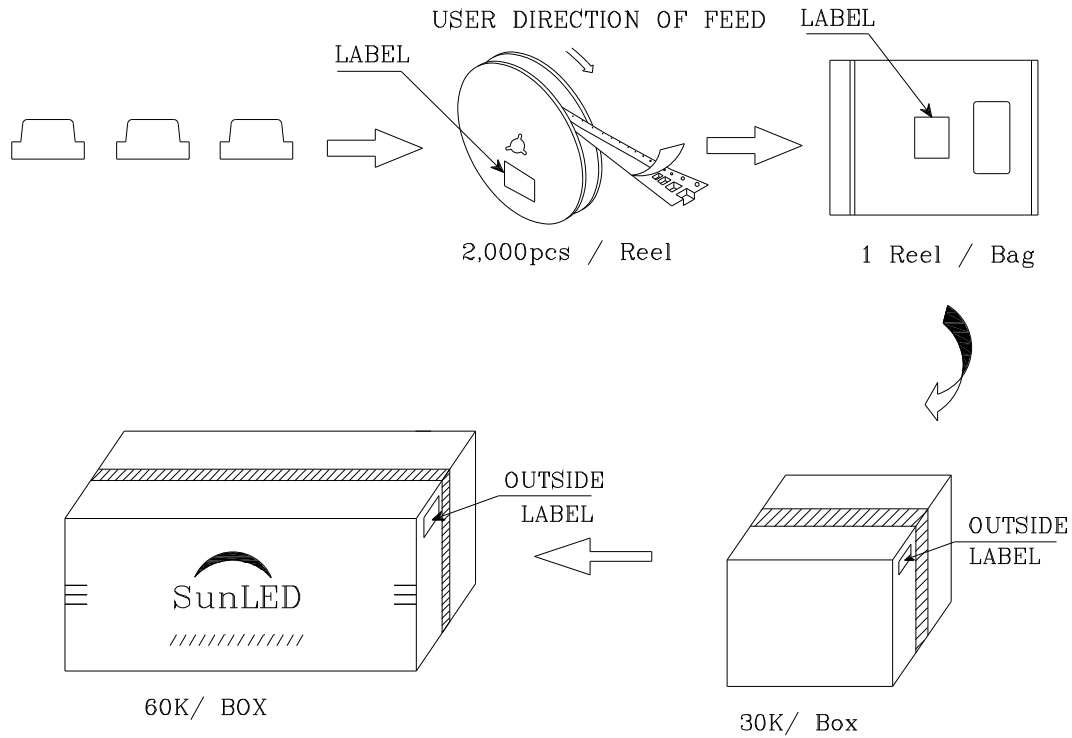
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

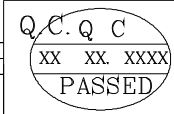
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

ZM2CY53W-1



		
P/NO : Zxxx53x-1		
QTY : 2000 pcs	CODE: XXX	
S/N : XX		
LOT NO:		
 XXXXXXXXXXXXXXXXXXXXX		
RoHS Compliant		