

## Part Number: XZM2CYK55W-1

3.2mmx1.6mm SMD CHIP LED LAMP

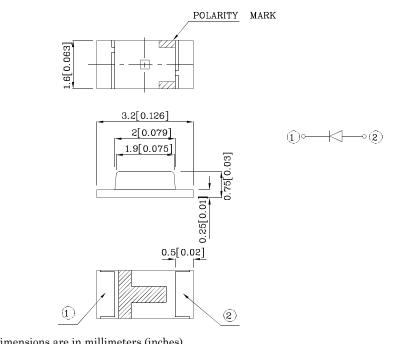
## **Features**

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



1. All dimensions are in millimeters (inches).

Notes:

**Package Schematics** 

2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.

3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Yellow (AlGaInP)	Unit	
Reverse Voltage	$V_{R}$	5	V	
Forward Current	$I_{\rm F}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	140	mA	
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	75	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	-0	

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics (T <sub>A</sub> =25°C)		Yellow (AlGaInP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.5	V	
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA	
Wavelength of Peak Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λP	590*	nm	
Wavelength of Dominant EmissionCIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	590*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	20	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	45	$_{\rm pF}$	

Part Number	Emitting Color	Emitting Material	Lens-color	CIE127 (I <sub>F</sub> =2	9 Intensity 7-2007* 0mA) cd	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZM2CYK55W-1	Yellow	AlGaInP	Water Clear	200*	317*	590*	140°

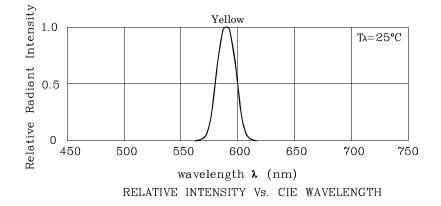
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

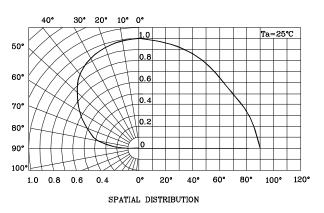
Sep 17,2016

XDSB7145 V3-Z Layout: Maggie L.

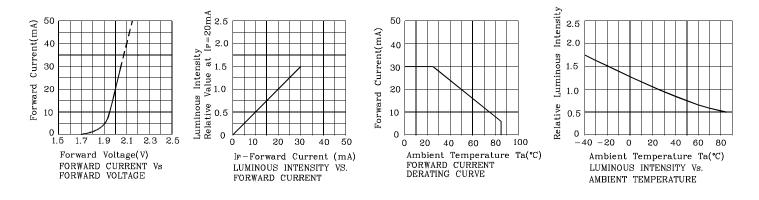


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## **\*** Yellow



# LED is recommended for reflow soldering and soldering profile is shown below.

300 (°C) 10 s max 250 4°C/s C/s max 200 150~180 4°C/s max 150 Temperature 30~50s 80~120: 100 50 0 150 0 50 100 200 250 300 (sec) Tim Notes:

Reflow Soldering Profile for SMD Products (Pb-Free Components)

1. Maximum soldering temperature should not exceed 260°C 2. Recommended reflow temperature: 145°C-260°C

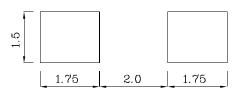
3. Do not put stress to the epoxy resin during

high temperatures conditions

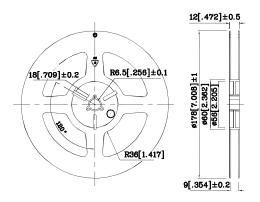


The device has a single mounting surface. The device must be mounted according to the specifications.

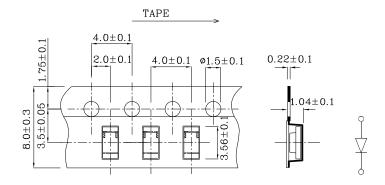
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



# 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

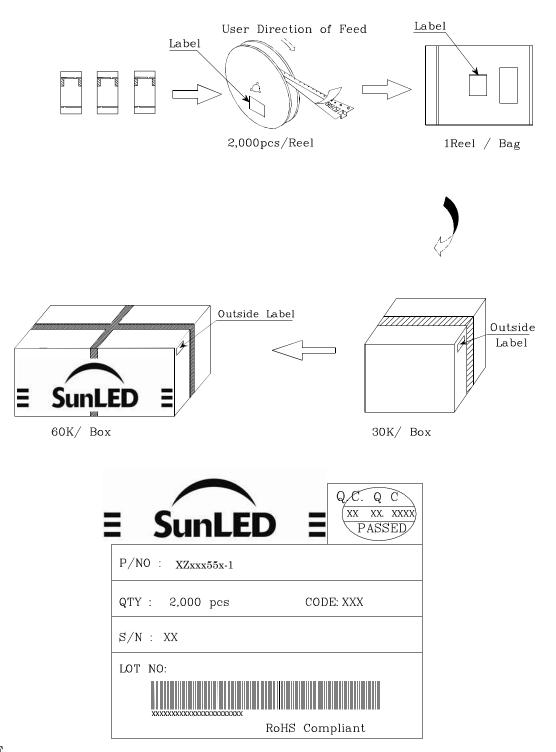
2. Luminous intensity / luminous flux: +/-15%

3. Forward Voltage: +/-0.1V  $\,$ 

Note: Accuracy may depend on the sorting parameters.



## **PACKING & LABEL SPECIFICATIONS**



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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet. User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
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- 6. Additional technical notes are available at <u>http://www.SunLEDusa.com/TechnicalNotes.asp</u>

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