

3.2x1.6mm SMD CHIP LED LAMP

#### **Features**

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



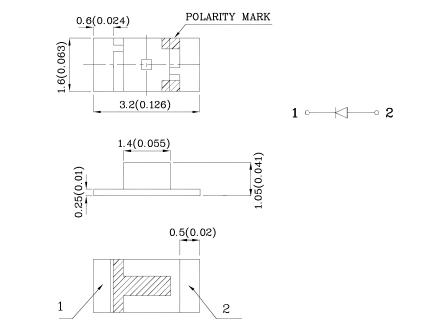




# ATTENTION

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

# Package Schematics



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 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	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	140	mA	
Power Dissipation	$P_{D}$	75	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	C	

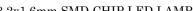
A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics (T <sub>A</sub> =25°C)		Yellow (AlGaInP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	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)	λΡ	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)	$\triangle \lambda$	20	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	45	pF	

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* $(I_F=20 \mathrm{mA})$ mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 2θ 1/2
				min.	typ.		
XZM2CYK55W-2	Yellow	AlGaInP	Water Clear	200*	317*	590*	140°

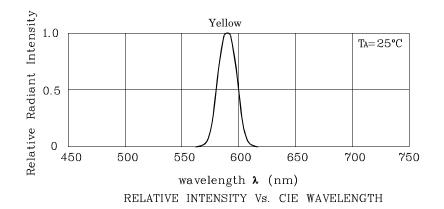
<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

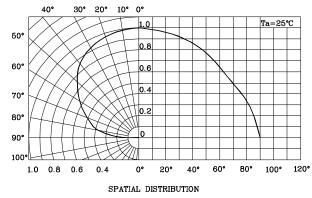
Sep 23,2016 XDSB7781 V3-Z Layout: Maggie L.



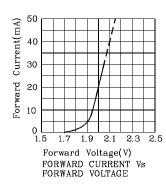


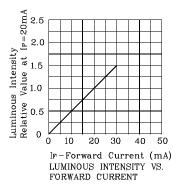
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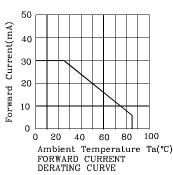


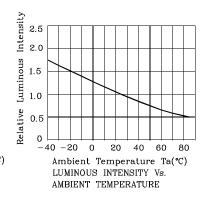


#### **❖** Yellow



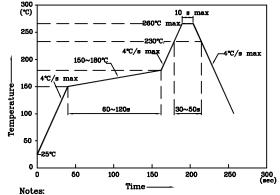






# LED is recommended for reflow soldering and soldering profile is shown below.

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



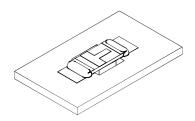
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- Do not put stress to the epoxy resin during high temperatures conditions



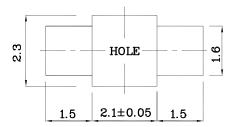


# ❖ The device has a single mounting surface. The device must be mounted according to the specifications.

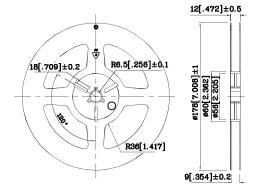
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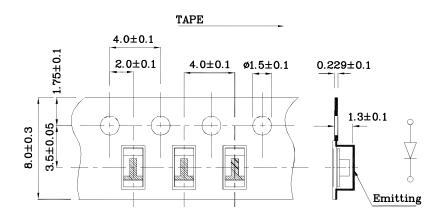
# **❖** Recommended Soldering Pattern (Units: mm; Tolerance: $\pm 0.1$ )



#### **❖** 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:

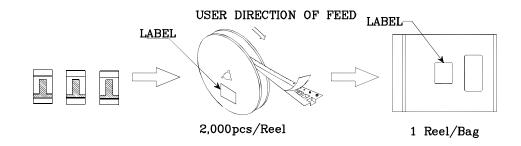
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

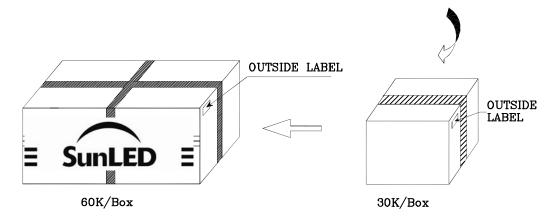
Note: Accuracy may depend on the sorting parameters.

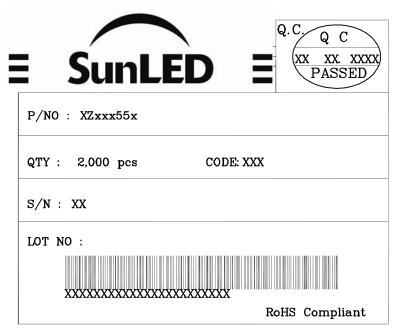




#### PACKING & LABEL SPECIFICATIONS







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