



3. 0mmx1.0 mm RIGHT ANGLE 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

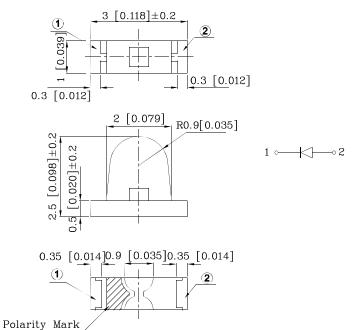
• RoHS compliant.

Jan 19,2016





## Package Schematics



Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.15(0.006")$  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	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	175	mA	
Power Dissipation	$P_{D}$	75	mW	
Operating Temperature	$T_{A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

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)

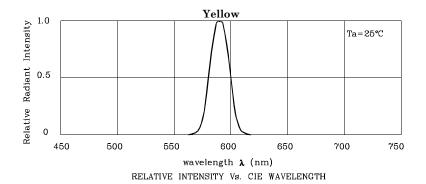
Operating Characteristics ( $T_A$ =25°C)	Yellow (AlGaInP)	Unit	
Forward Voltage (Typ.) $(I_F=20\text{mA})$	$V_{\mathrm{F}}$	2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.5	V
Reverse Current (Max.) $(V_R=5V)$	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) ( $I_F$ =20mA)	λΡ	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λD	590*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$\triangle \lambda$	20	nm
Capacitance (Typ.) $(V_F=0V, f=1MHz)$	С	20	рF

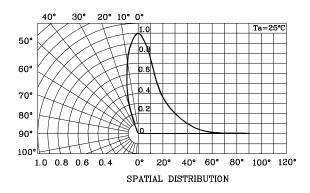
Part Number	Emitting Color	Emitting Material	Lens-color	$ m Luminous \ CIE127 \ (I_F=2000 \ me \ matrix )$	0mA)	Wavelength CIE127-2007* nm λΡ	Viewing Angle 20 1/2
				min.	typ.		
XZMYK56W-1	Yellow	AlGaInP	Water Clear	300*	447*	590*	30°

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

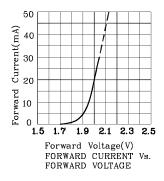


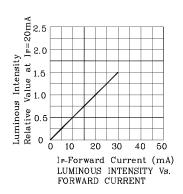
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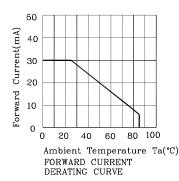


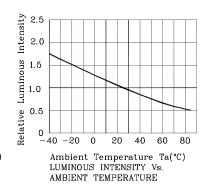


## **❖** Yellow



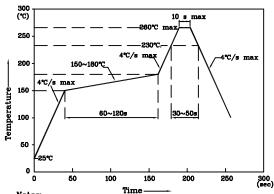




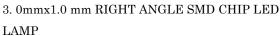


# LED is recommended for reflow soldering and soldering profile is shown below.

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



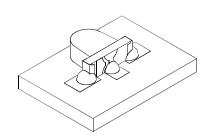
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions



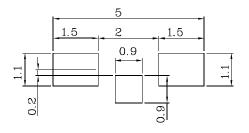


❖ The device has a single mounting surface. The device must be mounted according to the specifications.

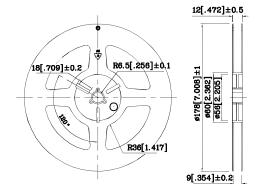
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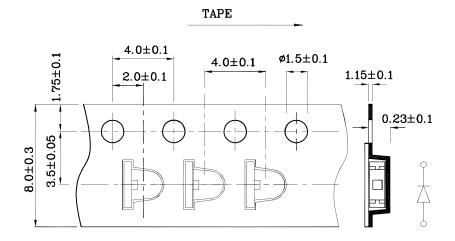
# **❖** Recommended Soldering Pattern (Units: mm; Tolerance: $\pm 0.1$ )



## **❖** 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:

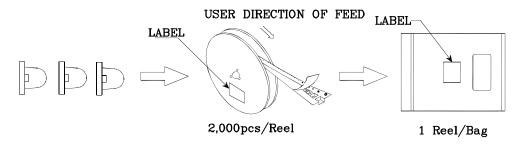
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

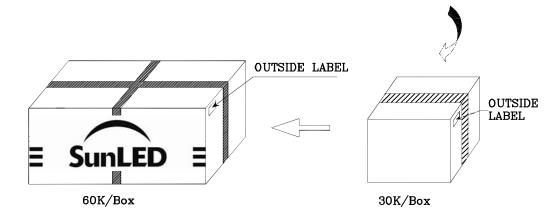
Note: Accuracy may depend on the sorting parameters.

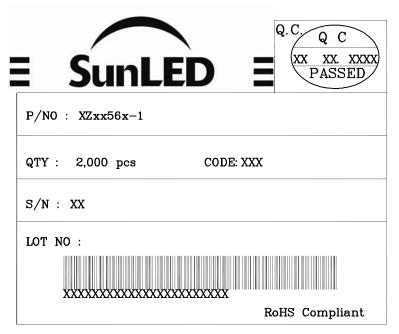
 $3.\ 0 mmx 1.0\ mm$  RIGHT ANGLE SMD CHIP LED

LAMP

### PACKING & LABEL SPECIFICATIONS







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XDSB1817 V5-Z Layout: Maggie L.