

#### Part Number: XZM2CRK56W

3.0mmx1.0 mm RIGHT ANGLE SMD CHIP LED LAMP

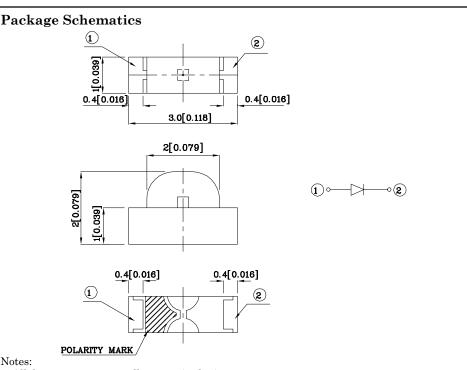
#### Features

- VersoLEDs: Versatile Solutions
- 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).

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)		Red (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	150	mA	
Power Dissipation	PD	84	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)		Red (AlGaInP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.2	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.8	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)	λР	640*	nm	
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	625*	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	27	$\mathrm{pF}$	

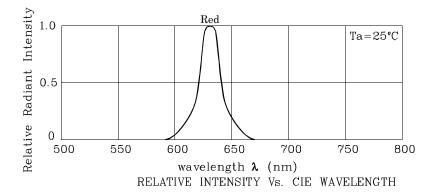
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZM2CRK56W	Red	AlGaInP	Water Clear	700 200*	1095 377*	640*	120°

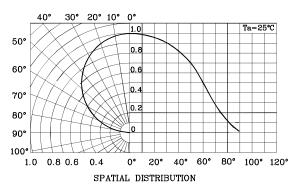
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

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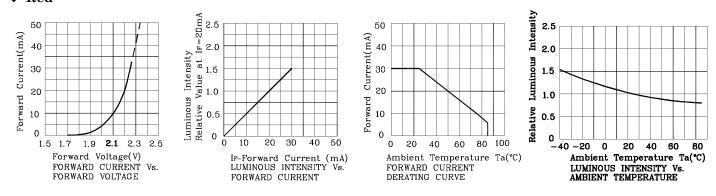
XDSB7796 V3-X Layout: Maggie L.



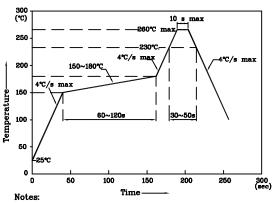




Red



# 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

2. Recommended reflow temperature: 145°C-260°C 3. Do not put stress to the epoxy resin during

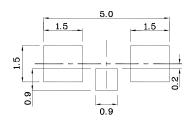
high temperatures conditions



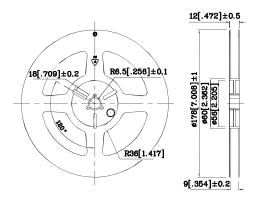
✤ The device has a single mounting surface. The device must be mounted according to the specifications.

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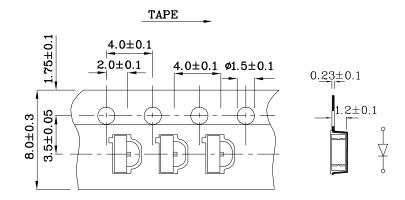
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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

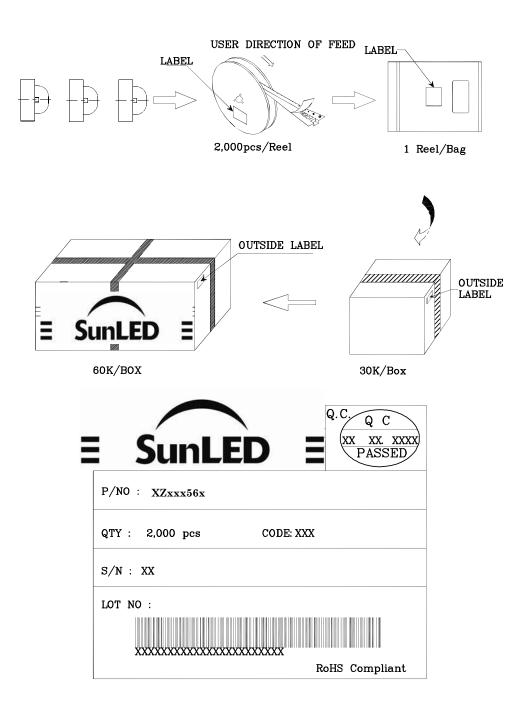
2. Luminous intensity / luminous flux: +/-15%

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

Note: Accuracy may depend on the sorting parameters.



## **PACKING & LABEL SPECIFICATIONS**



#### TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- 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. 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please
- consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
- 5. The contents within this document may not be altered without prior consent by SunLED.
- $6. \ Additional \ technical \ notes \ are \ available \ at \ \underline{http://www.SunLEDusa.com/TechnicalNotes.asp}$

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