

## Part Number: XZMEDGCBD56W

3.0x1.0mm RIGHT ANGLE SMD CHIP LED LAMP

### Features

- $\bullet$  3.0 X 1.0 X 1.5mm right angle SMD LED
- Ideal for indication on hand held products
- Low current operation
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant

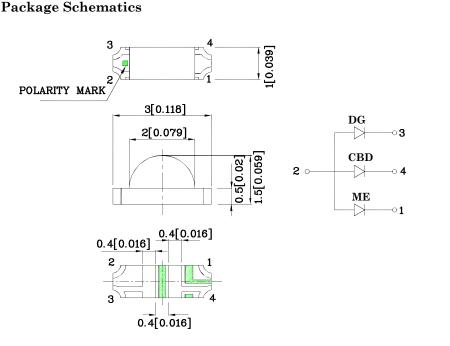


ATTENTION OBSERVE PRECAUTIONS

FOR HANDLING

ELECTROSTATIC

DISCHARGE SENSITIVE DEVICES





1. All dimensions are in millimeters (inches).

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

3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		ME (AlGa	DG (InG	CBD (InG	Unit	Operating Characteristics (T <sub>A</sub> =25°C)		ME (AlGaInP)	DG (InGaN)	CBD (InGaN)	Unit
Reverse Voltage	VR	InP) 5	aN) 5	<b>aN)</b> 5 V		Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2	3.3	3.3	v
5		-	-	-							
Forward Current	$I_{\rm F}$	30	25	30	mA	Forward Voltage (Max.) (I <sub>F</sub> =20mA)		2.5	4.1	4.0	V
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	195	150	150	mA	$\frac{(\Gamma_{\rm F}=2000{\rm A})}{(V_{\rm R}=5{\rm V})}$	I <sub>R</sub>	10	50	50	uA
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	75	102.5	120	mW	Wavelength of Peak					
Electrostatic Discharge Threshold (HBM)		-	450	250	V	Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λP	632*	515*	460*	nm
Operating Temperature TA   Storage Temperature Tstg		-40 ~ +85			°C	Wavelength of Dominant Emission CIE127-2007*(Typ.)	λD	624*	525*	465*	nm
						(I <sub>F</sub> =20mA)			020	100	
		1				Spectral Line Full Width At Half-Maximum (Typ.) $(I_F=20mA)$	$ riangle \lambda$	20	30	25	nm
						Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	25	45	100	pF

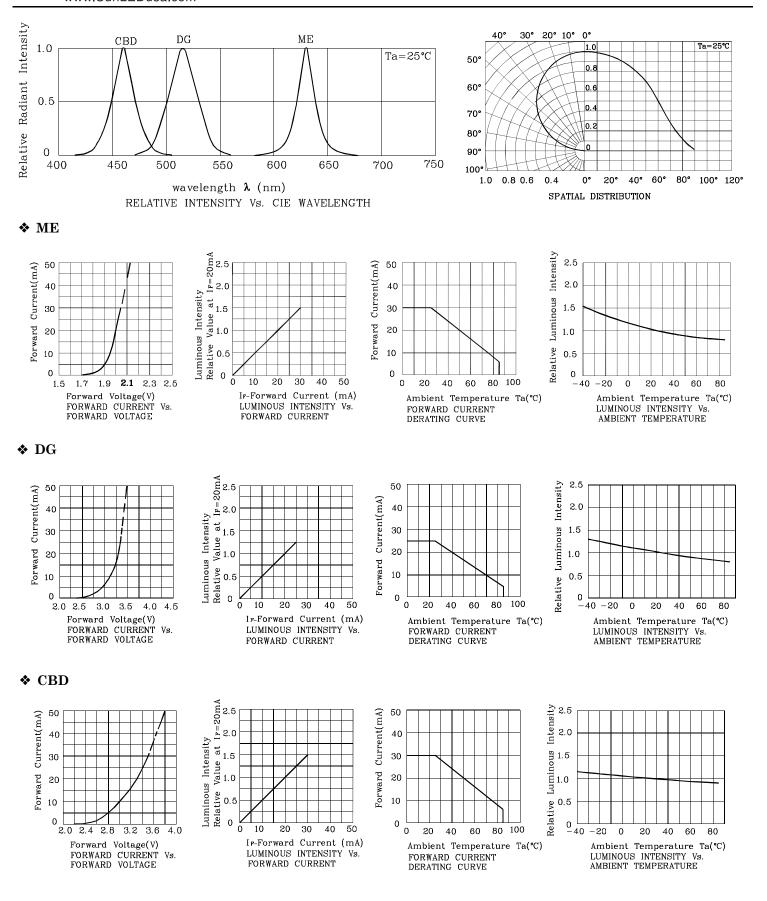
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* λΡ nm	Viewing Angle 20 1/2	
				min.	typ.			
	Red	AlGaInP		80*	138*	632*		
XZMEDGCBD56W	Green	InGaN	Water Clear	200*	397*	515*	120°	
	Blue	InGaN	_	40*	69*	460*		

\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Mar 06.2014

XDSB7052 V2-Z Layout: Maggie L.

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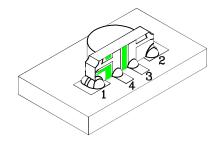
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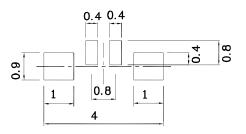


LED is recommended for reflow soldering and soldering profile is shown below.

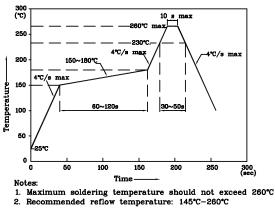
**\*** The device has a single mounting surface. The device must be mounted according to the specifications.



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



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

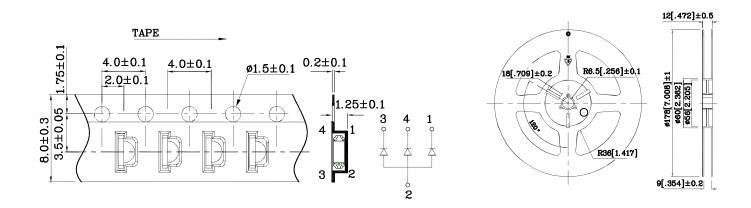


3. Do not put stress to the epoxy resin during

high temperatures conditions

## **\*** Tape Specification (Units : mm)

# Reel Dimension



#### 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

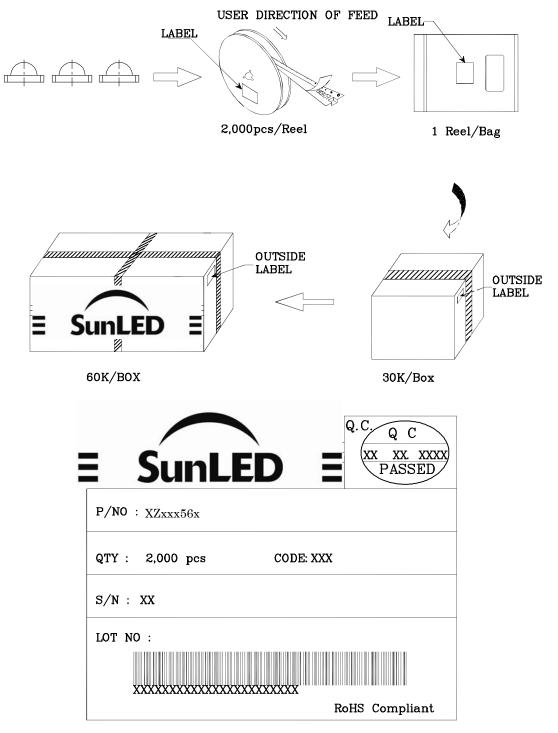
2. Luminous intensity / luminous flux: +/-15%

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.
- 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
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