

### Part Number: XZCBD60W

3.0 mmx 1.5 mm SMD CHIP LED LAMP

### **Features**

 $\bullet$  Ideal for indication light on hand held products

• Long life and robust package

• Variety of lens types and color choices available

ullet Package : 2000pcs / reel

• Moisture sensitivity level : level 3

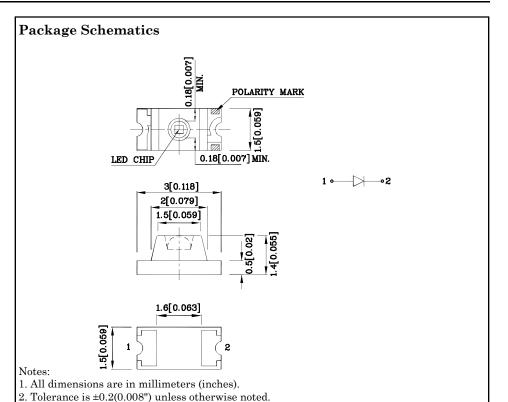
• RoHS compliant







# ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



Absolute Maximum Ratings (T <sub>A</sub> =25°C)	CBD (InGaN)	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	150	mA	
Power Dissipation	$P_{D}$	120	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Threshold (HBM)	250	V		

Operating Characteristics (T <sub>A</sub> =25°C)		CBD (InGaN)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	3.3	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$ m V_F$	4	V	
Reverse Current (Max.) $(V_R=5V)$	${ m I}_{ m R}$	50	uA	
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λΡ	468	nm	
Wavelength of Dominant Emission (Typ.) $(I_F=20\text{mA})$	$\lambda \mathrm{D}$	470	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$\triangle \lambda$	25	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	100	pF	

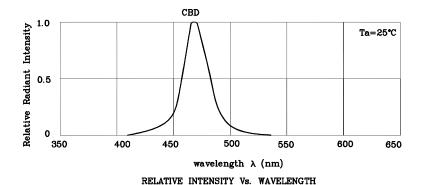
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZCBD60W	Blue	InGaN	Water Clear	120	198	468	70°

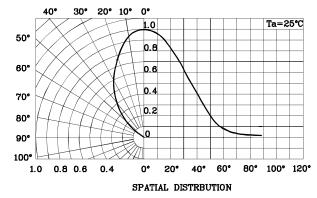
3. Specifications are subject to change without notice.

Apr 23,2011 XDSA5517 V4 Layout: Maggie L.

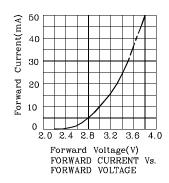


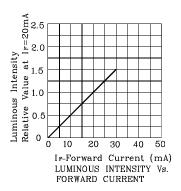


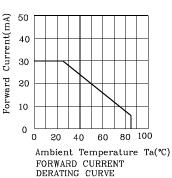


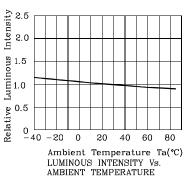


### **♦** CBD



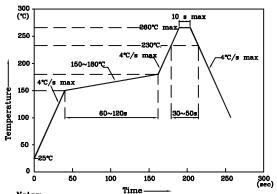






## LED is recommended for reflow soldering and soldering profile is shown below.

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

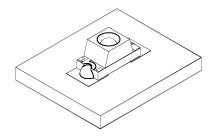


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

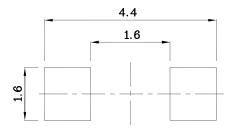




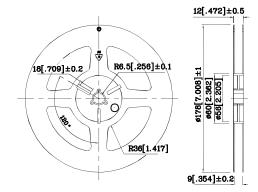
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



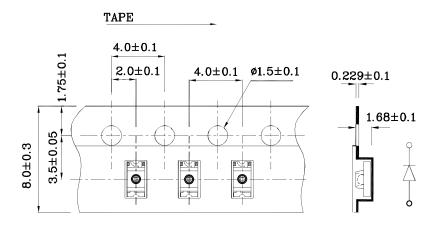
❖ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



### **❖** 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.

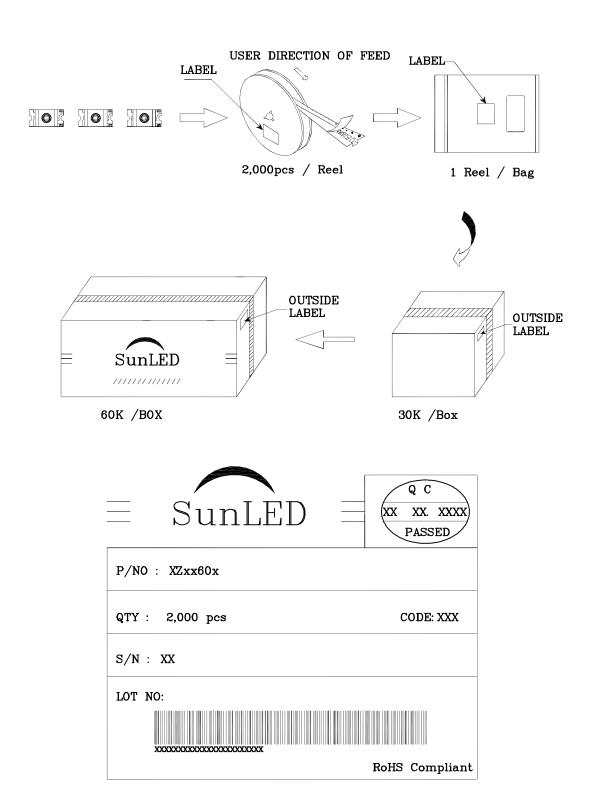
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### PACKING & LABEL SPECIFICATIONS



Apr 23,2011