

## Part Number: XZCBD55W-3

3.2x1.6mm SMD CHIP LED LAMP

### Features

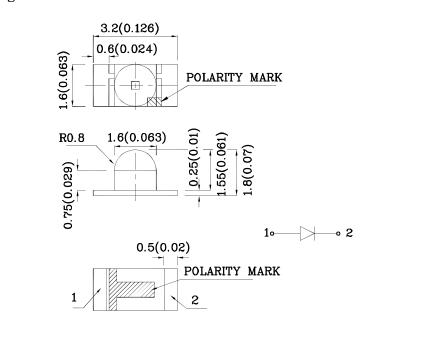
- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- Package: 2000 pcs / reel
- Moisture sensitivity level : level 3
- RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES





Notes: 1. All dimensions are in millimeters (inches).

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

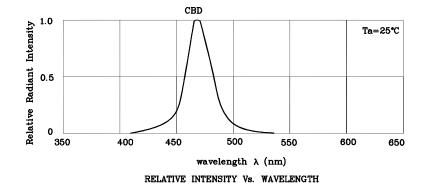
3. Specifications are subject to change without notice.

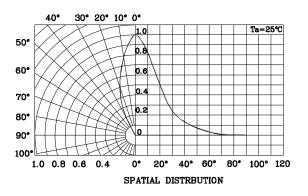
Absolute Maximum Ratings (T <sub>A</sub> =25°C)	CBD (InGaN)	Unit		
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$\mathbf{I}_{\mathbf{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	150	mA	
Power Dissipation	$P_{D}$	120	mW	
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C	
Storage Temperature	Tstg	$-40 \sim +85$	-0	
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)	$V_{\rm F}$	3.3	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	4	V	
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	50	uA	
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λΡ	468	nm	
Wavelength of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λD	470	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	25	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	100	$_{\rm pF}$	

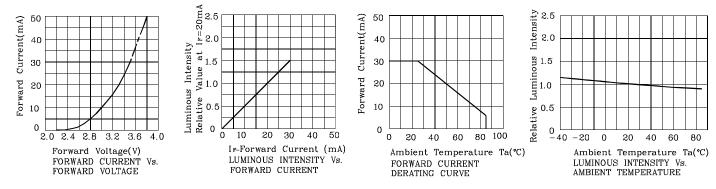
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZCBD55W-3	Blue	InGaN	Water Clear	380	695	468	40°



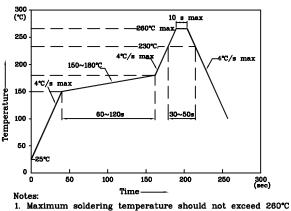




#### ♦ CBD



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



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

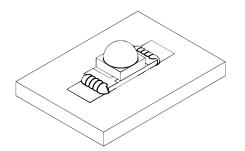
2. Recommended reflow temperature: 145°C-260°C

3. Do not put stress to the epoxy resin during

high temperatures conditions



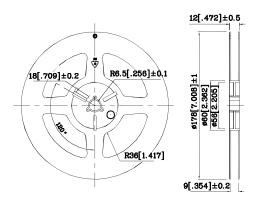
✤ The device has a single mounting surface. The device must be mounted according to the specifications.



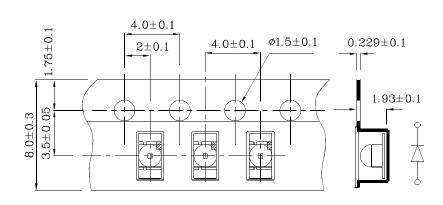
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



## Tape Specification (Units : mm)



TAPE

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\%

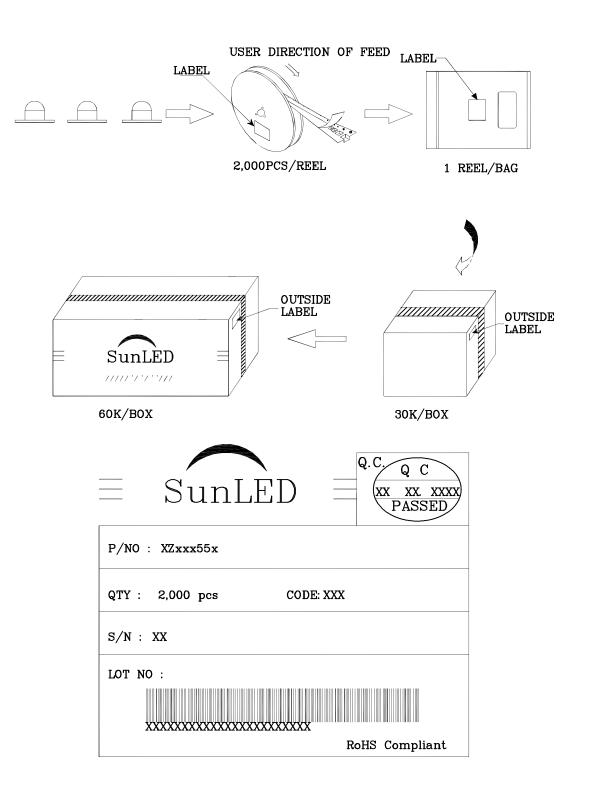
3. Forward Voltage: +/-0.1V  $\,$ 

Note: Accuracy may depend on the sorting parameters.

Apr 18,2011



## PACKING & LABEL SPECIFICATIONS



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