

Part Number: XZCBD55W

3.2x1.6mm SMD CHIP LED LAMP

Features

- •3.2mmx1.6mm SMT LED, 1.1mm thickness.
- •Low power consumption.
- •Wide viewing angle.
- •Ideal for backlight and indicator.
- $\bullet Various$ colors and lens types available.
- ullet Package : 2000pcs / reel.
- •Moisture sensitivity level : level 3.
- •RoHS compliant.







ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

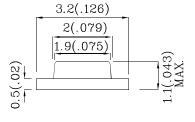
Notes:

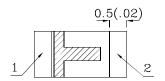
- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2(0.008")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Rat (TA=25°C)	CBD (AlGaInN)	Unit			
Reverse Voltage	VR	5	V		
Forward Current	IF	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA		
Power Dissipation	PD	120	mW		
Operating Temperature	TA	-40 ~ +85	°C		
Storage Temperature	Tstg	-40 ~ +85	C		

]	PC	LAR <u>ity M</u> ark	
$\overline{}$	_		
063	1		
ő	_		
$\widetilde{\mathcal{L}}$			
<u>.</u>	L		
٠.,		'	







Operating Characteristic (TA=25°C)	CBD (AlGaInN)	Unit	
Forward Voltage (Typ.) (IF=20mA)	VF	3.3	V
Forward Voltage (Max.) (IF=20mA)	VF	4.0	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength Of Peak Emission (Typ.) (IF=20mA)	λΡ	468	nm
Wavelength Of Dominant Emission (Typ.) (IF=20mA)	λ D	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	25	nm
Capacitance (VF=0V, f=1MHz)	С	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		$\begin{array}{c} Wavelength \\ nm \\ \lambda \ P \end{array}$	Viewing Angle 2 θ 1/2
				min.	typ.		
XZCBD55W	Blue	AlGaInN	Water Clear	50	98	468	120°

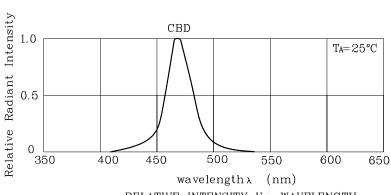
Published Date : AUG 22, 2009 Drawing No : XDSA6871 V2 Checked : B.L.LIU P.1/4



XZCBD55W Part Number:

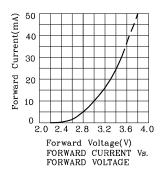
3.2x1.6mm SMD CHIP LED LAMP

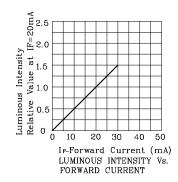


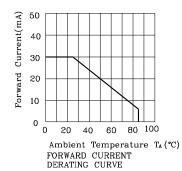


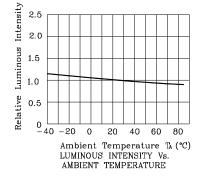
RELATIVE INTENSITY Vs. WAVELENGTH

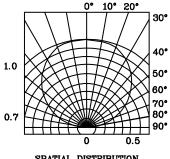
♦ CBD











SPATIAL DISTRIBUTION

P.2/4 Published Date : AUG 22, 2009Drawing No: XDSA6871 V2Checked: B.L.LIU

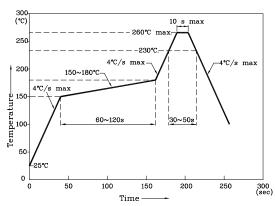


Part Number: XZCBD55W

3.2x1.6mm SMD CHIP LED LAMP

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

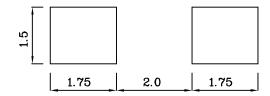


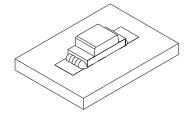
NOTE

- 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.

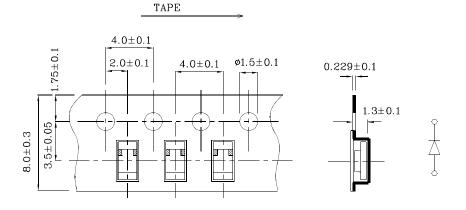
❖ Recommended Soldering Pattern (Units: mm;Tolerance:± 0.1)

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





* 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.

Published Date: AUG 22, 2009 Drawing No: XDSA6871 V2 Checked: B.L.LIU P.3/4

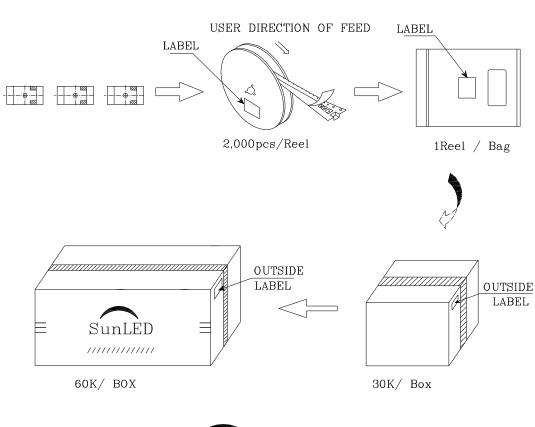


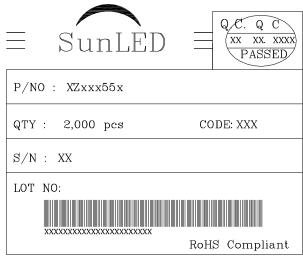
Part Number: XZCBD55W

3.2x1.6mm SMD CHIP LED LAMP

PACKING & LABEL SPECIFICATIONS

XZCBD55W





Published Date : AUG 22, 2009 Drawing No : XDSA6871 V2 Checked : B.L.LIU P.4/4