

2

0.5(.02)

0.13(.005) POLARITY MARK

1.25(.049)





2.0x1.25mm SMD CHIP LED LAMP

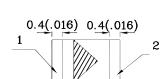
Features

- 2.0mmx1.25mm SMT LED,1.1mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.





ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



2(.079)

1.3(.051) 1.2(.047)

Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is \pm 0.1(0.004") unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Rating (TA=25°C)	CBD (InGaN)	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

Operating Characteristic (TA=25°C)	CBD (InGaN)	Unit	
Forward Voltage (Typ.) (IF=20mA)	$V_{\rm F}$	3.3	V
Forward Voltage (Max.) (IF=20mA)	$V_{\rm F}$	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 (Typ.) (VF=0V, f=1MHz)	С	100	pF

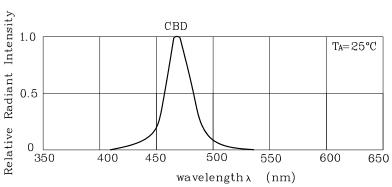
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 0 1/2
				min.	typ.		
XZCBD54W	Blue	InGaN	Water Clear	50	98	468	120°
Published Date : D	EC 18,2009	Drawing	g No : XDSB3977	V1	Checked	l : B.L.LIU	P.1/4



Part Number: XZCBD54W

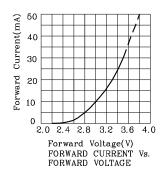
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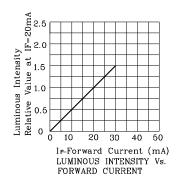


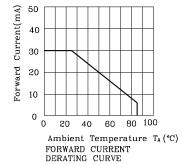


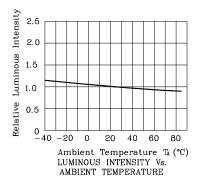
RELATIVE INTENSITY Vs. WAVELENGTH

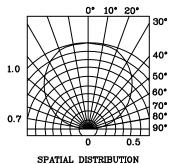
♦ CBD











 $Published\ Date: DEC\ 18,2009 \qquad \qquad Drawing\ No: XDSB3977 \qquad \qquad V1 \qquad \quad Checked: B.L.LIU \qquad \qquad P.2/4$

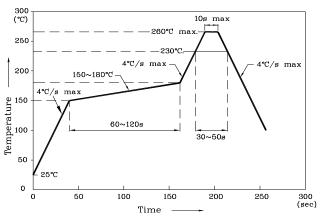
Part Number: XZCBD54W

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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.



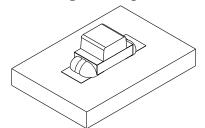
Notes:

- $1. Maximum \ soldering \ temperature \ should \ not \ exceed \ 260 ^{\circ}\text{C}.$
- 2. Recommended reflow temperature: 145°c-260°C.
- 3.Do not put stress to the epoxy resin during high temperatures conditions.

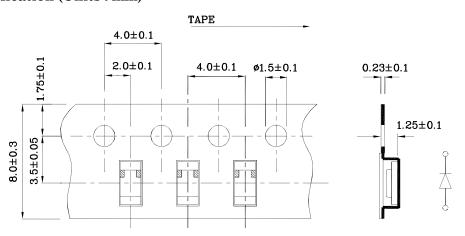
❖ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

❖ 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.

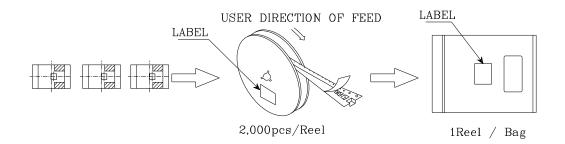


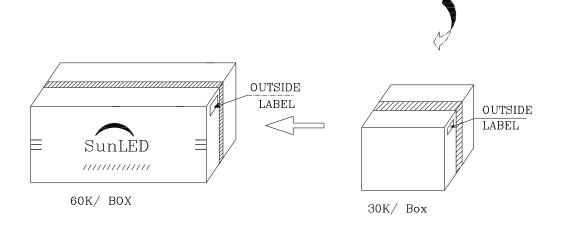
Part Number: XZCBD54W

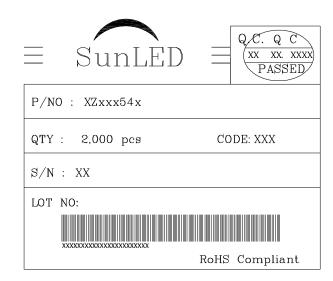
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PACKING & LABEL SPECIFICATIONS

XZCBD54W







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