

### Features

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

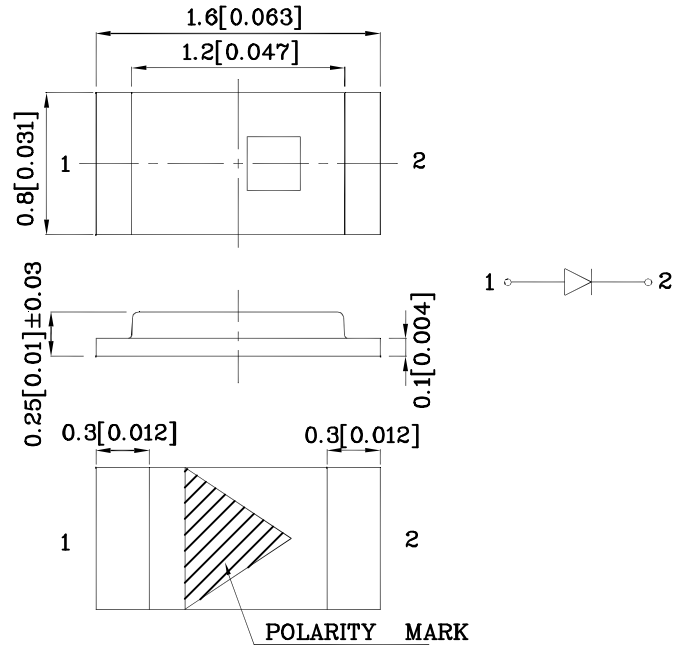


**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

### Applications

1. Mobile phone Keypad indicator and backlight .
2. Flat backlight for LCD, switch and symbol.
3. Toys.

### Package Schematics



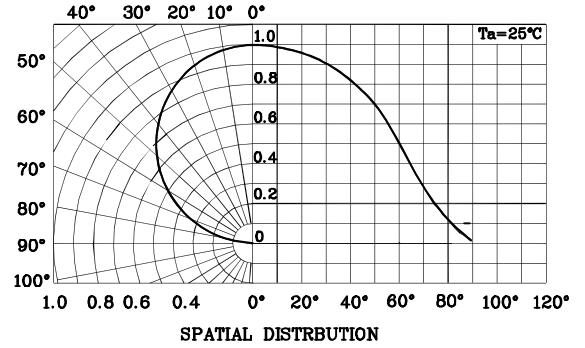
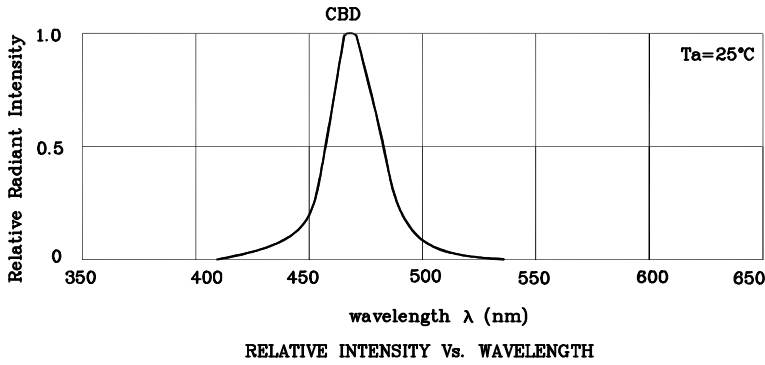
**Notes:**

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

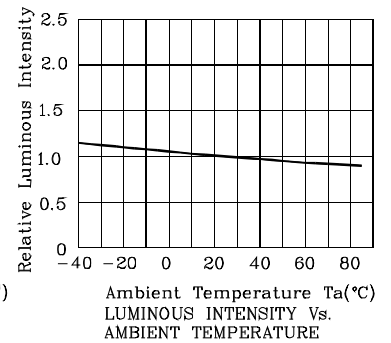
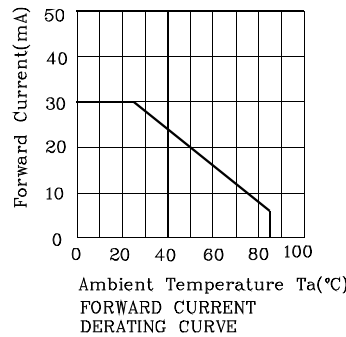
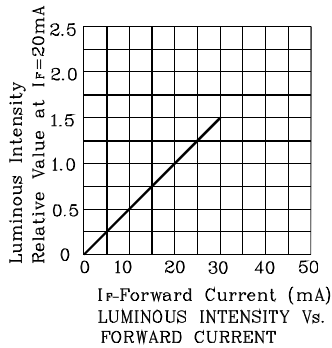
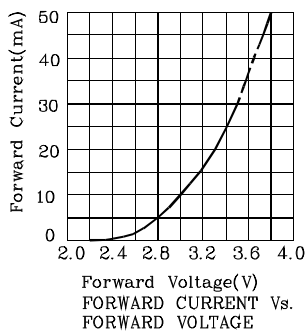
Absolute Maximum Ratings (T <sub>A</sub> =25°C)		CBD (InGaN)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	150	mA
Power Dissipation	P <sub>D</sub>	120	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-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 <sub>F</sub>	3.3	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	4	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	50	uA
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λ <sub>P</sub>	468	nm
Wavelength of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λ <sub>D</sub>	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	25	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λ <sub>P</sub>	Viewing Angle 2θ 1/2
				min.	typ.		
XZCBD53W-6	Blue	InGaN	Water Clear	50	98	468	120°



❖ CBD



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

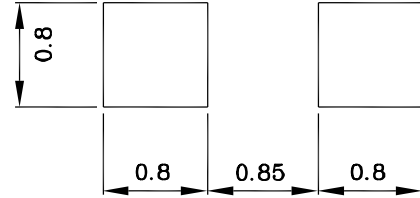
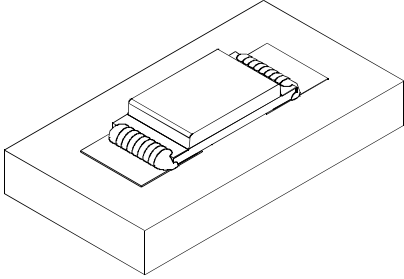
**Reflow Soldering Profile for SMD Products (Pb-Free Components)**



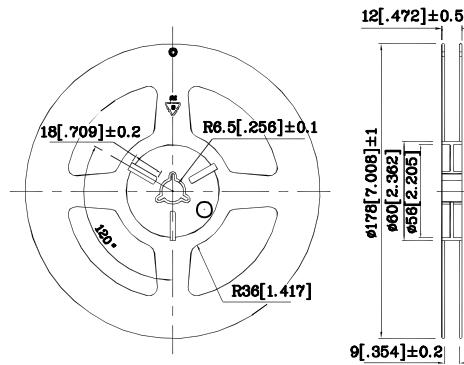
- Notes:
1. Maximum soldering temperature should not exceed 260°C
  2. Recommended reflow temperature: 145°C-260°C
  3. Do not put stress to the epoxy resin during high temperatures conditions

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

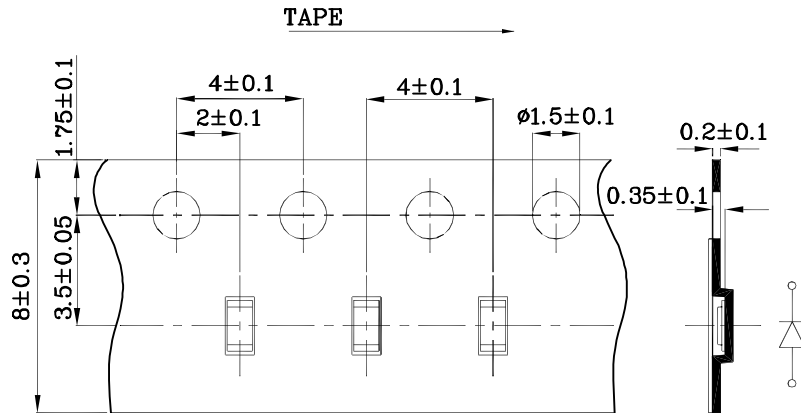
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance:  $\pm 0.1$ )



❖ Reel Dimension



❖ Tape Specification (Units : mm)



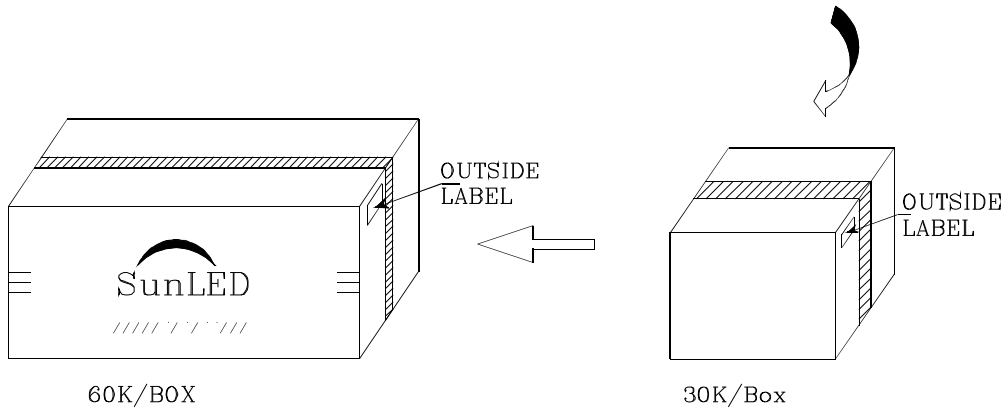
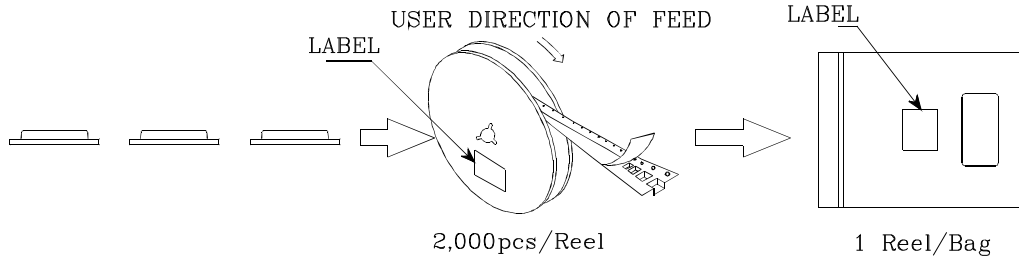
Remarks:



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:  $\pm 1\text{nm}$
2. Luminous intensity / luminous flux:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**



		<table border="1"> <tr><td>Q.C.</td></tr> <tr><td>Q C</td></tr> <tr><td>XX XX. XXXX</td></tr> <tr><td>PASSED</td></tr> </table>	Q.C.	Q C	XX XX. XXXX	PASSED
Q.C.						
Q C						
XX XX. XXXX						
PASSED						
P/N0 : XZxxx53x-6						
QTY : 2,000 pcs	CODE: XXX					
S/N : XX						
LOT NO:						
						
RoHS Compliant						