

Part Number: XZCBD53W-6

2

0.3(0.012)

2

1.6(0.063)

1.2(0.047)

1.6x0.8x0.25mm (0603) SMD CHIP LED LAMP

10

 $\frac{1}{10.1(0.004)}$

-02

Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 4,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- \bullet RoHS compliant





Applications

3.Toys

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

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

Package Schematics

0.8(0.031)1

 ${}^{0.25(0.01)}_{\pm 0.03}$

2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.

1

Polarity mark

3. Specifications are subject to change without notic

0.3(0.012)

Absolute Maximum Ratings (T _A =25°C)	Blue (InGaN)	Unit		
Reverse Voltage	V_{R}	5	V	
Forward Current	$I_{\rm F}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA	
Power Dissipation	\mathbf{P}_{D}	120	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Threshold (HBM)	250	V		

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

ubject to change without notice.							
Operating Characteristics (T _A =25°C)		Blue (InGaN)	Unit				
Forward Voltage (Typ.) (I _F =20mA)	$V_{\rm F}$	3.3	V				
Forward Voltage (Max.) (I _F =20mA)	$V_{\rm F}$	4	v				
Reverse Current (Max.) $(V_R=5V)$	I_R	50	uA				
Wavelength of Peak Emission CIE127-2007*(Typ.) (I _F =20mA)	λP	460*	nm				
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I _F =20mA)	λD	465*	nm				
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$ riangle\lambda$	25	nm				
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	100	pF				

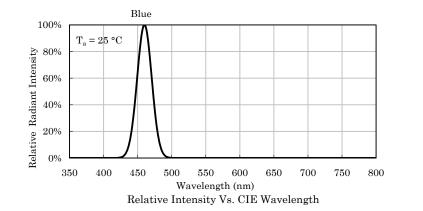
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZCBD53W-6	Blue	InGaN	Water Clear	40*	98*	460*	130°
*I uminous intensity value and		and an a mith OIE	197 9007 -tdd-				

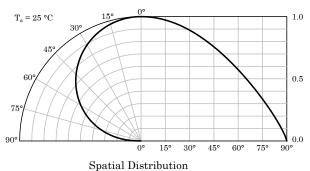
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Oct 17,2018

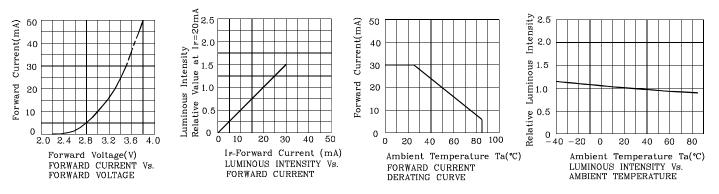
XDSB2077 V8-Z Layout: Maggie L.



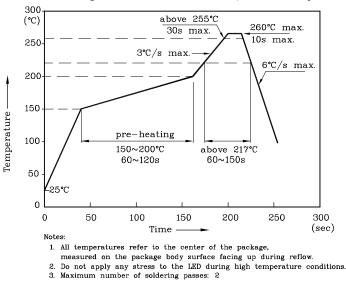




Blue



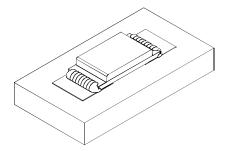
LED is recommended for reflow soldering and soldering profile is shown below.



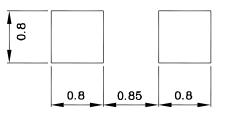
Reflow Soldering Profile for SMD Products (Pb-Free Components)



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

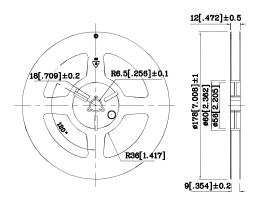


Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)

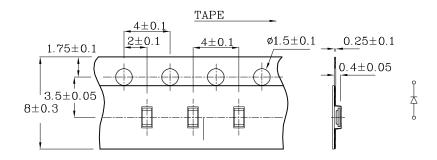


Mask open area ratio:80% Mask thickness:80~100um

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

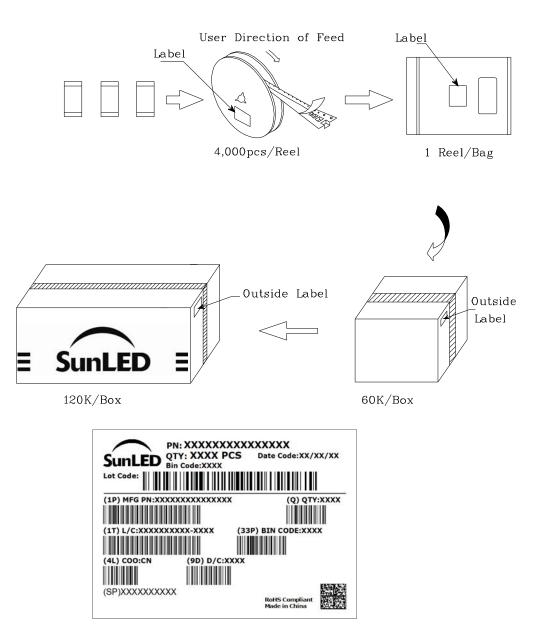
2. Luminous intensity / luminous flux: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS



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