

Part Number: XZCBD55W-A2RT

3.2 x 1.6 mm SMD Chip LED Lamp

Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- Halogen-free
- RoHS compliant

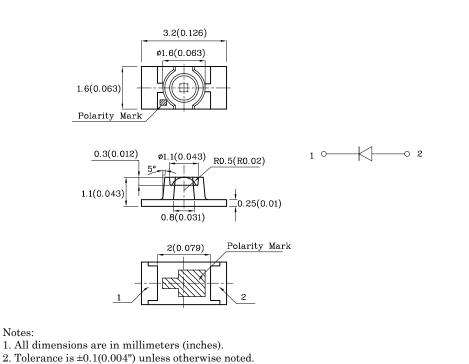




ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

Notes:

Package Schematics



3. Specifications are subject to change without notice.

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

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)

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_{F}	4	V
Reverse Current (Max.) (V _R =5V)	I_R	50	μΑ
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)	$\bigtriangleup\lambda$	25	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (IF=20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZCBD55W-A2RT	Blue	InGaN	Water Clear	120*	248*	460*	80°

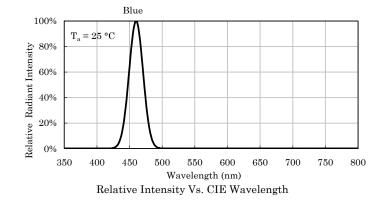
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

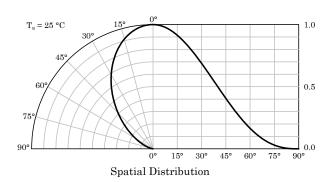
Mar 02,2023

XDSB3962 V8-Z Layout: Maggie L.

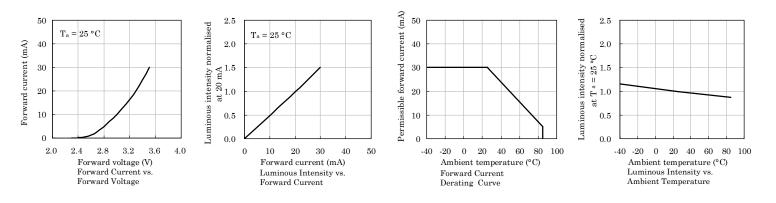


3.2 x 1.6 mm SMD Chip LED Lamp

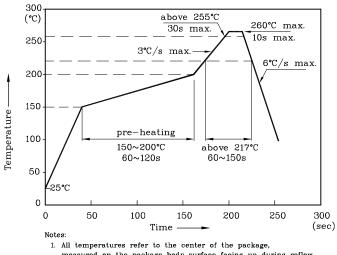




✤ Blue



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



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

measured on the package body surface facing up during reflow.

Do not apply any stress to the LED during high temperature conditions.
Maximum number of soldering passes: 2

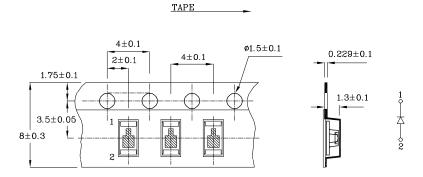


✤ The device has a single mounting surface. The device must be mounted according to the specifications.

Reel Dimension (Units : mm)

€6.5±0.5 Ø178±2 Ø178±2 Ø60±2 Ø178±2 Ø178±2 Ø178±2

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:

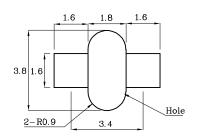
1. Wavelength: +/-1nm

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

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

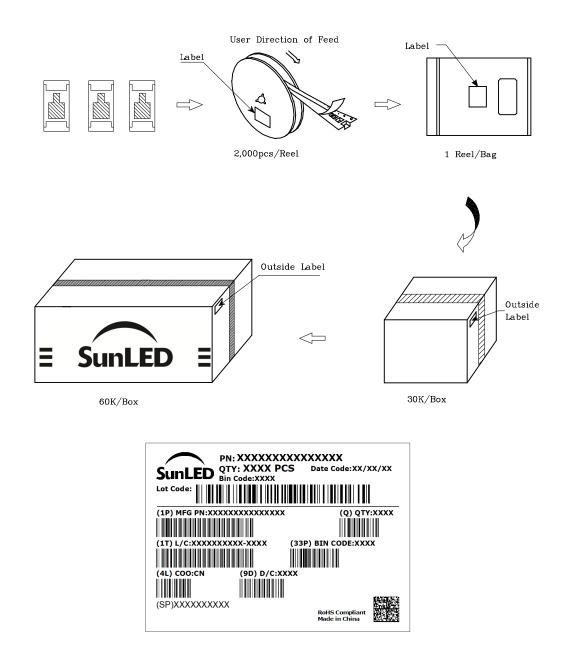
Note: Accuracy may depend on the sorting parameters.

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





PACKING & LABEL SPECIFICATIONS



TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet.
- User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
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