



 $3.8 \times 2.0 \text{ mm}$ Dome Lens SMD Chip LED Lamp

Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 500pcs/ Reel
- \bullet MSL (Moisture Sensitivity Level): 3
- Halogen-free
- RoHS compliant







ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

3.8(0.150) 2(0.079) 3.2(0.126)Min. 3(0.118)Min. 1(0.039) 1(0.039) 1(0.039) Polarity mark

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 Ratings (T _A =25°C)	Blue (InGaN)	Unit		
Reverse Voltage	V_{R}	5	V	
Forward Current	I_{F}	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	100	mA	
Power Dissipation	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)

Operating Characteristics (T _A =25°C)	Blue (InGaN)	Unit		
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	3.3	V	
Forward Voltage (Max.) (I _F =20mA)	V_{F}	4	V	
Reverse Current (Max.) (V _R =5V)	I_R	50	μА	
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λΡ	465*	nm	
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA)	λD	470*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	22	nm	
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	100	pF	

Luminous Intensity

Part Number	Emitting Color	Lens-color	Lens-color	Lens-color	` _ /		CIE127-2007* nm λP	Angle 20 1/2
				min.	typ.			
XZFBB79W	Blue	InGaN	Water Clear	500*	745*	465*	60°(H)	

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

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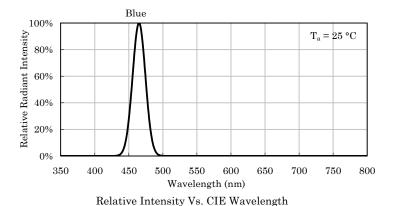
Wavelength

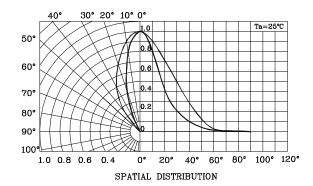
35°(V)

Viewing

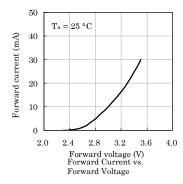


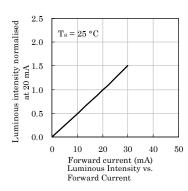


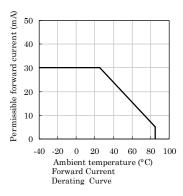


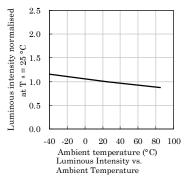


♦ Blue



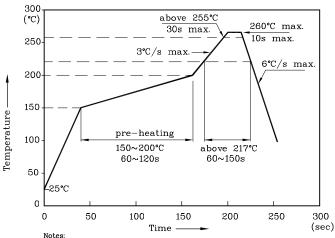






LED is recommended for reflow soldering and soldering profile is shown below.

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



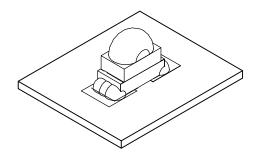
- 1. All temperatures refer to the center of the package,
 - measured on the package body surface facing up during reflow.
- 2. Do not apply any stress to the LED during high temperature conditions.

3. Maximum number of soldering passes: 2

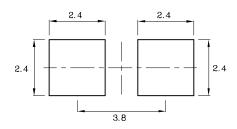




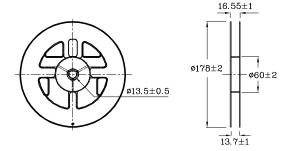
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



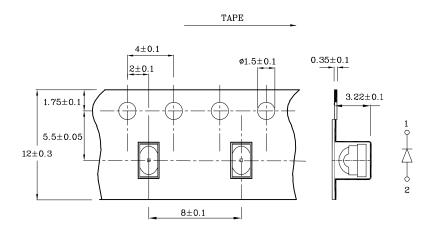
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



❖ Reel Dimension (Units:mm)



❖ 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

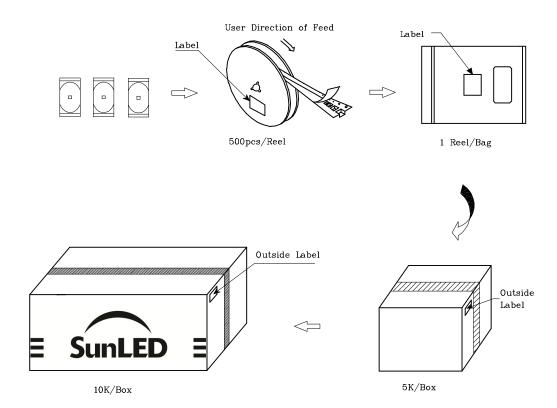
Note: Accuracy may depend on the sorting parameters.

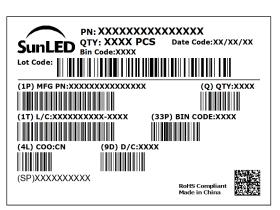
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PACKING & LABEL SPECIFICATIONS





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