

1.0 x 0.5 x 0.2mm (0402) SMD Chip LED Lamp

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 Halogen-free
- ullet RoHS compliant



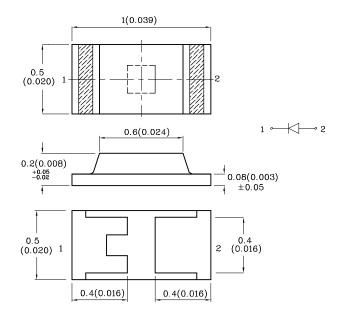




ATTENTION

OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Package Schematics (Preliminary Spec)



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 Ratings (T _A =25°C)	Blue (InGaN)	Unit		
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Current	5	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	25	mA	
Power Dissipation	P_{D}	16	mW	
Electrostatic Discharge Threshold (HBM)	250	V		
Operating Temperature		-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

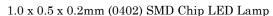
A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics (T _A =25°C)	Blue (InGaN)	Unit		
Forward Voltage (Typ.) (I _F =5mA)	$V_{ m F}$	2.9	V	
Forward Voltage (Max.) (I _F =5mA)	V_{F}	3.2	V	
Reverse Current (Max.) $(V_R=5V)$	$I_{ m R}$	50	μА	
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =5mA)	λΡ	463*	nm	
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=5\text{mA})$	λD	468*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =5mA)	Δλ	25	nm	

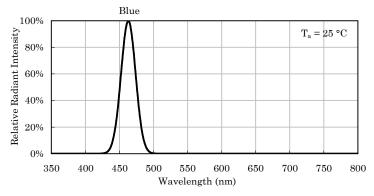
Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous Intensity} \\ \text{CIE127-2007*} \\ \text{(I_F=5mA)} \\ \text{mcd} \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZFBA68W5MAV-3	Blue	InGaN	Water Clear	20*	59*	463*	140°

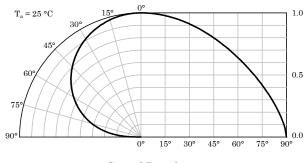
^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

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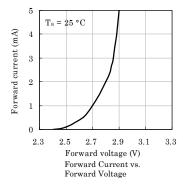


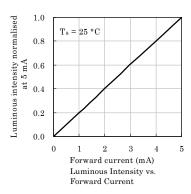


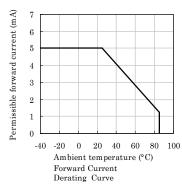
Relative Intensity Vs. CIE Wavelength

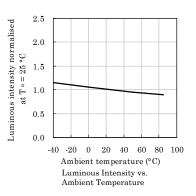
Spatial Distribution

❖ Blue



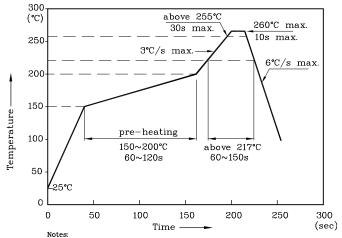






LED is recommended for reflow soldering and soldering profile is shown below.

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.

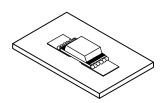
 2. Do not apply any stress to the LED during high temperature conditions.

 3. Maximum number of soldering passes: 2

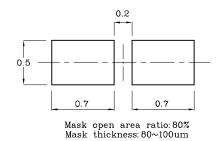
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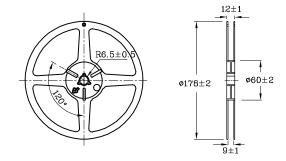
♦ The device has a single mounting surface. The device must be mounted according to the specifications.



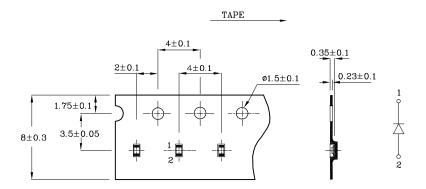
❖ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ 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.

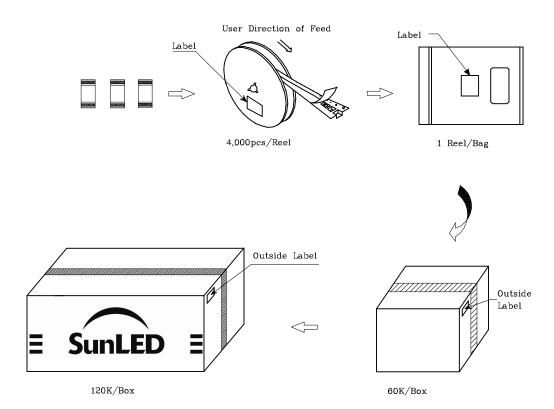
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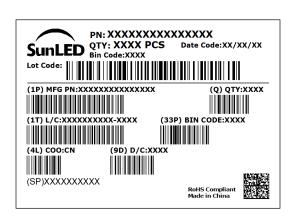
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PACKING & LABEL SPECIFICATIONS

www.SunLEDusa.com





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