

1.0x0.5x0.2mm (0402) SMD CHIP LED LAMP

Features

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

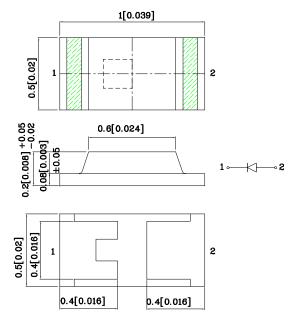






ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

Package Schematics



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)		Green (AlGaInP)	Unit	
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Current	I_{F}	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	120	mA	
Power Dissipation	P_{D}	60	mW	
Operating Temperature	$T_{\rm A}$	-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)	Green (AlGaInP)	Unit		
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	2.0	V	
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.4	V	
Reverse Current (Max.) $(V_R=5V)$	I_R	10	uA	
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λΡ	572*	nm	
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA)	λD	571*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	20	nm	

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous CIE127 (I _F =20 mo	0mA)	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZVGR68W-3	Green	AlGaInP	Water Clear	12*	34*	572*	120°

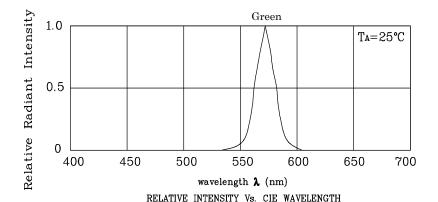
^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

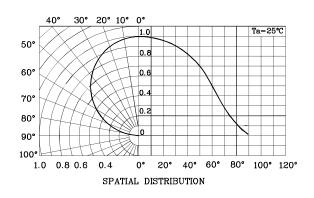
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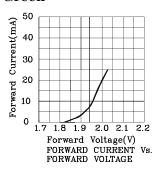


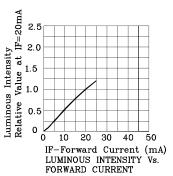


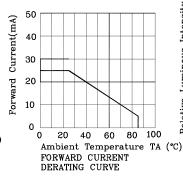


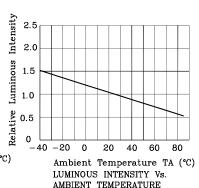


❖ Green



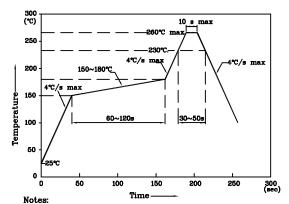






LED is recommended for reflow soldering and soldering profile is shown below.

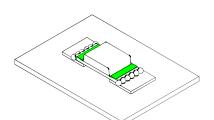
Reflow Soldering Profile for SMD Products (Pb-Free Components)



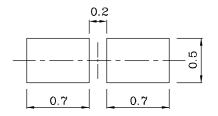
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

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

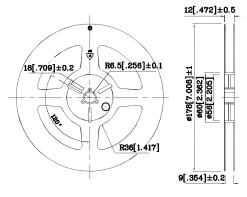


❖ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

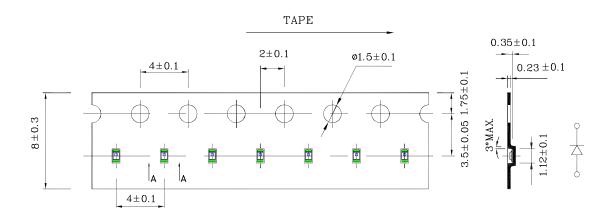


Mask open area ratio:80% Mask thickness:80~100um

❖ Reel Dimension



❖ Tape Specification (Units:mm)

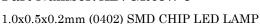


Remarks:

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:

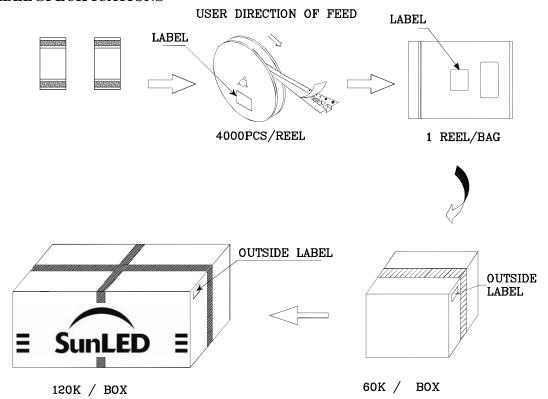
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

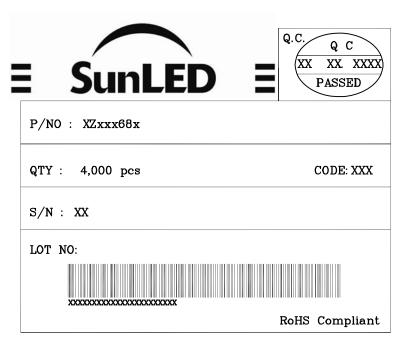
Note: Accuracy may depend on the sorting parameters.





PACKING & LABEL SPECIFICATIONS





TERMS OF USE

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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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- 6. Additional technical notes are available at http://www.SunLEDusa.com/TechnicalNotes.asp

Sep 16,2016 XDSB7584 V5-Z Layout: Maggie L.