



1.8 x 0.6 mm Right Angle SMD Chip LED Lamp

## **Features**

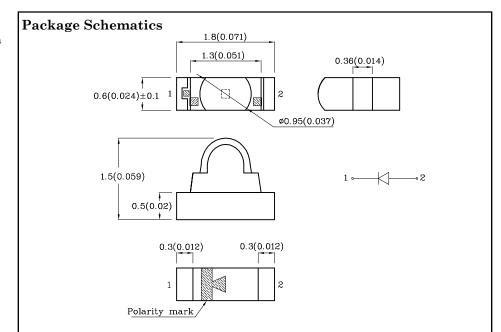
- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 4,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- Halogen-free
- RoHS compliant







# ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.15(0.006")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.
- 4. The solder stencil thickness for right angle SMD LEDs should be at least 5mil in order to prevent poor solder wetting.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Green (AlGaInP)	Unit
Reverse Voltage	$V_{R}$	5	V
Forward Current	$I_{\mathrm{F}}$	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA
Power Dissipation	$P_{\mathrm{D}}$	75	mW
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	C

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 <sub>A</sub> =25°C)	Green (AlGaInP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.1	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.5	V
Reverse Current (Max.) $(V_R=5V)$	$I_{\mathrm{R}}$	10	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λР	574*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	570*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	20	nm
Capacitance (Typ.) $(V_F=0V, f=1MHz)$	С	15	pF

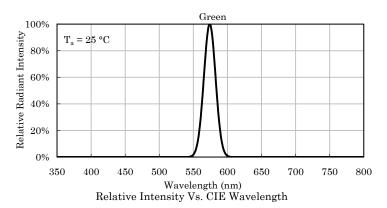
Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} {\rm Luminous} \\ {\rm CIE127} \\ {\rm (I_F=20} \\ {\rm me} \end{array}$	0mA)	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZVG168W	Green	AlGaInP	Water Clear	120*	397*	574*	25°

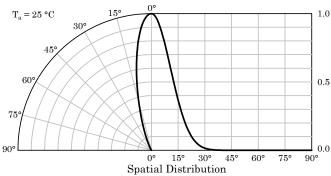
<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Mar 01, 2023 XDSB9074 V3-Z Layout: Maggie L.

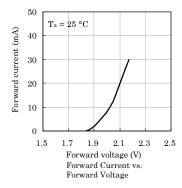


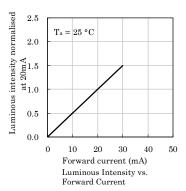


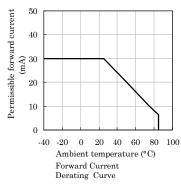


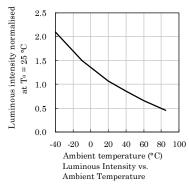


## **❖** Green



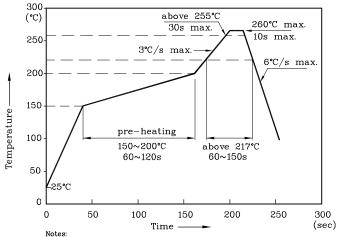






# LED is recommended for reflow soldering and soldering profile is shown below.

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.

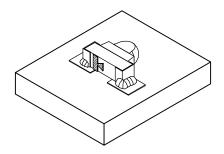
  3. Maximum number of soldering passes: 2

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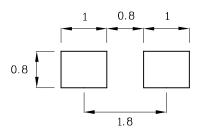




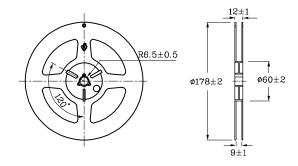
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



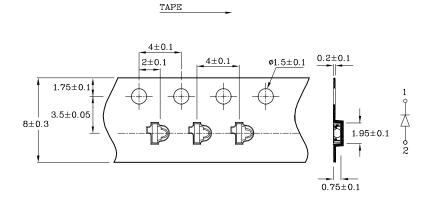
**♦** Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ 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:

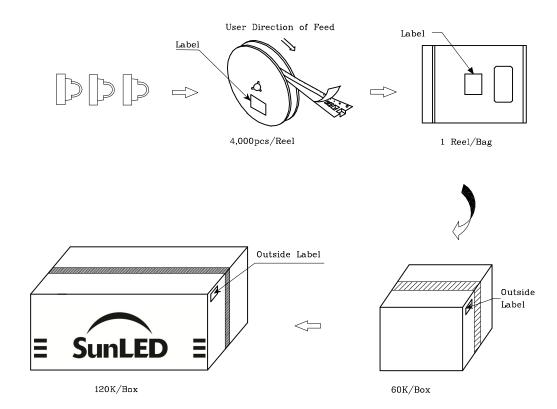
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

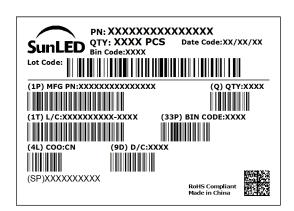
Note: Accuracy may depend on the sorting parameters.





## PACKING & LABEL SPECIFICATIONS





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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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Mar 01, 2023