



3.0 mm x 1.0 mm Right Angle 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



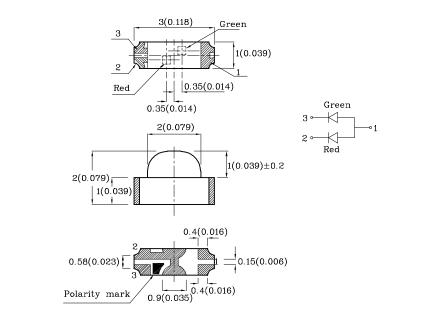




ATTENTION

OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Package Schematics



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.

Absolute Maximum Ratings (T _A =25°C)		Red (AlGaInP)	Green (AlGaInP)	Unit
Reverse Voltage	V_{R}	5	5	V
Forward Current	I_{F}	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	185	150	mA
Power Dissipation	P_D	75	75	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)		Red (AlGaInP)	Green (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	1.95	2.1	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.5	2.5	V
Reverse Current (Max.) $(V_R=5V)$	I_{R}	10	10	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λР	645*	574*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA)	λD	630*	570*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	28	20	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	35	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} Luminous \ Intensity \\ CIE127\text{-}2007* \\ (I_F\text{=}20\text{mA}) \ mcd \end{array}$		Wavelength CIE127-2007* λP nm	Viewing Angle 20 1/2
				min.	typ.		
XZMDKVG56W Green	Red	AlGaInP	Water Clear	120 40*	297 79*	645*	140°
	Green	AlGaInP		40 40*	69 69*	574*	

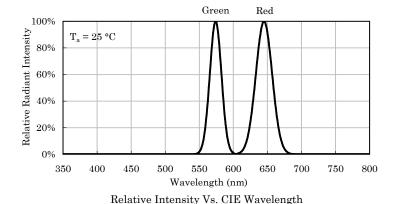
^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Nov 26.2020

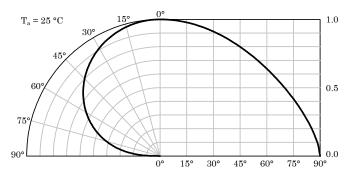
XDSA4063 V10-X Layout: Maggie L.





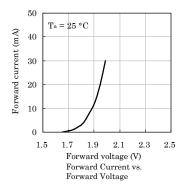
www.SunLEDusa.com

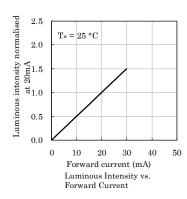


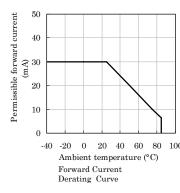


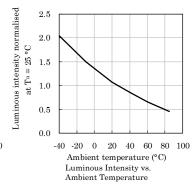
Spatial Distribution

❖ Red

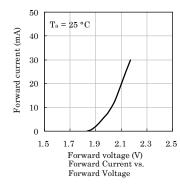


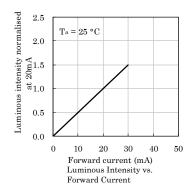


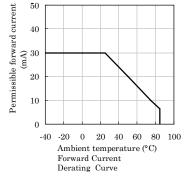


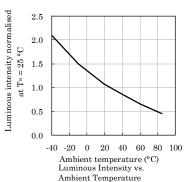


Green







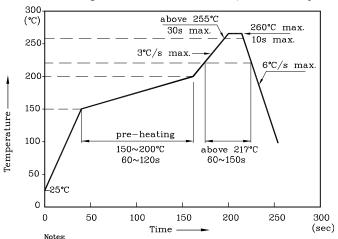






LED is recommended for reflow soldering and soldering profile is shown below.

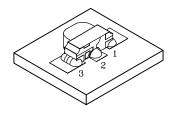
Reflow Soldering Profile for SMD Products (Pb-Free Components)



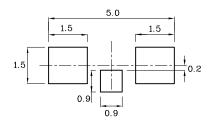
- 1. All temperatures refer to the center of the package,
- measured on the package body surface facing up during reflow.

 2. Do not apply any stress to the LED during high temperature conditions. 3. Maximum number of soldering passes: 2

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

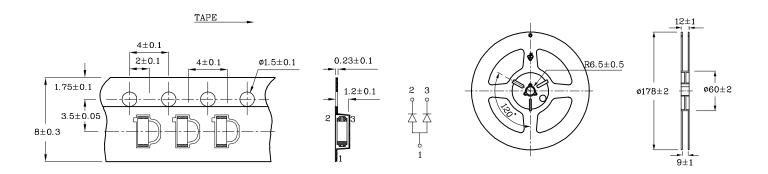


Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ Tape Specification (Units:mm)

❖ Reel Dimension (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:

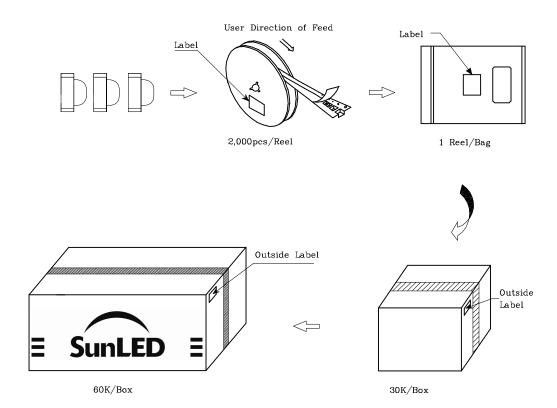
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

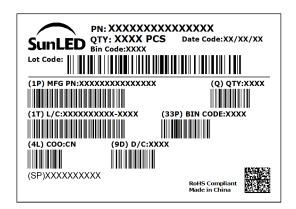
Note: Accuracy may depend on the sorting parameters.





PACKING & LABEL SPECIFICATIONS





TERMS OF USE

- $1.\ Data\ presented\ in\ this\ document\ reflect\ statistical\ figures\ and\ should\ be\ treated\ as\ technical\ reference\ only.$
- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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- 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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- $6. \ Additional\ technical\ notes\ are\ available\ at\ \underline{https://www.SunLEDusa.com/TechnicalNotes.asp}$

Nov 26,2020