

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

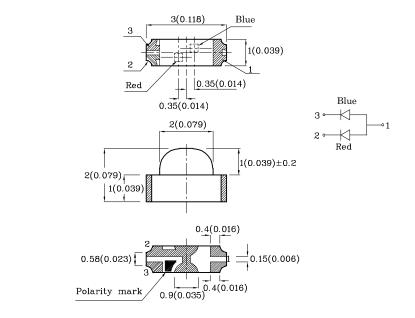






ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

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)	Blue (InGaN)	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	ifs	185	150	mA
Power Dissipation	P_{D}	75	120	mW
Electrostatic Discharge Threshold (HBM)		3000	250	V
Operating Temperature	T_{A}	-40 ~	+85	°C
Storage Temperature Tstg		-40 ~		

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)	Blue (InGaN)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	1.95	3.3	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.5	4	V
Reverse Current (Max.) (V _R =5V)	I_{R}	10	50	μA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λР	645*	460*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA)	λD	630*	465*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	28	25	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	35	100	pF

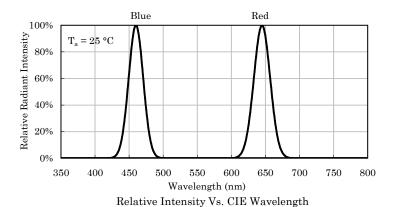
	Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
					min.	typ.		
	V/IMDI/CDD#eW	Red	AlGaInP	- Water Clear	120 40*	297 79*	645*	140°
XZMDKCBD56W —	Blue	InGaN	- water Clear	40 40*	89 89*	460*	140°	

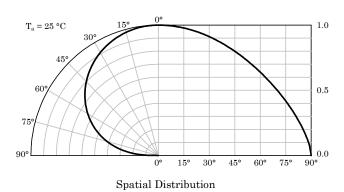
^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Nov 26.2020

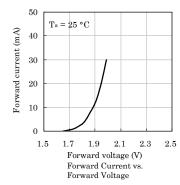
XDSB6207 V7-X Layout: Maggie L.

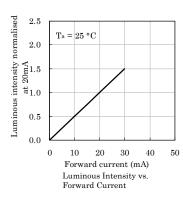
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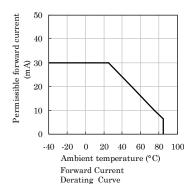


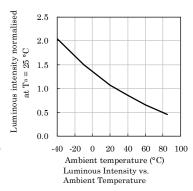


❖ Red

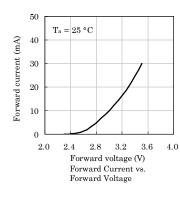


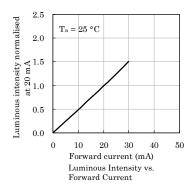


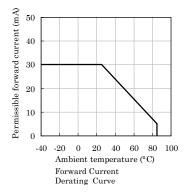


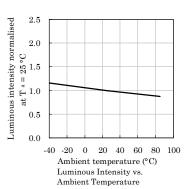


♦ Blue







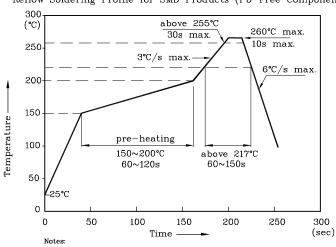






LED is recommended for reflow soldering and soldering profile is shown below.

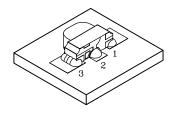
Reflow Soldering Profile for SMD Products (Pb-Free Components)



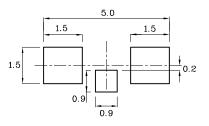
- 1. All temperatures refer to the center of the package, measured on the package body surface facing up during reflow.
- 2. Do not apply any stress to the LED during high temperature conditions.

 3. Maximum number of soldering passes: 2

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

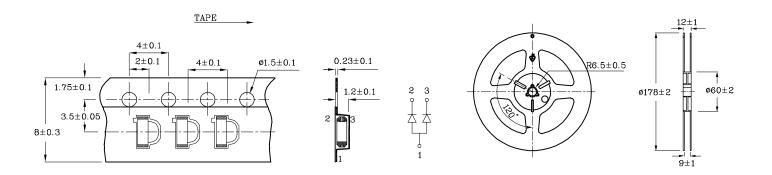


Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ Tape Specification (Units:mm)

❖ Reel Dimension (Units:mm)



Remarks:

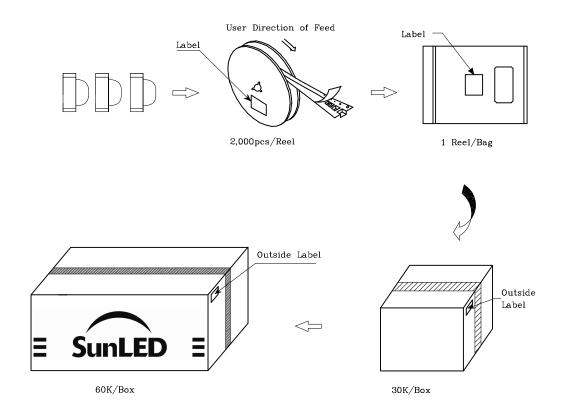
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

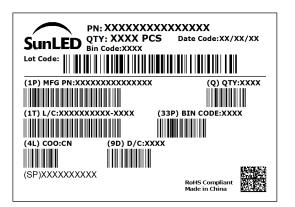
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

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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- 6. Additional technical notes are available at https://www.SunLEDusa.com/TechnicalNotes.asp

Nov 26,2020 XDSB6207 V7-X Layout: Maggie L.