3.2x1.6mm SMD CHIP LED LAMP

Features

• Ideal for indication light on hand held products

• Long life and robust package

 \bullet Standard Package: 2,000pcs/ Reel

• MSL (Moisture Sensitivity Level): 3

• RoHS compliant

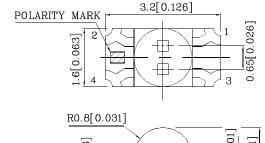


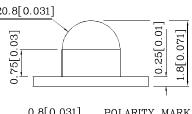


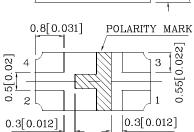


ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

Package Schematics







YELLOW $2 \circ \longrightarrow 1$ GREEN $4 \circ \longrightarrow 3$

Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2(0.008")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T_A =25°C)		Yellow (AlGaInP)	Green (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	i_{FS}	140	100	mA
Power Dissipation	P_{D}	75	120	mW
Electrostatic Discharge TI (HBM)	3000 450		V	
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 $(T_A=25^{\circ}C)$	Yellow (AlGaInP)	Green (InGaN)	Unit	
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	2	3.2	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.5	4	V
Reverse Current (Max.) $(V_R=5V)$	I_{R}	10	50	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λP	590*	520*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA)	λD	590*	525*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	20	35	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	45	100	pF

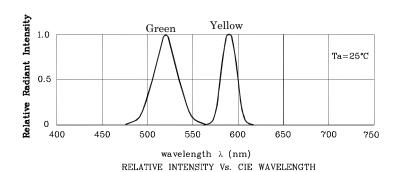
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* $(I_F=20 mA)$ mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZM2CYKM2DG55W-8	Yellow	AlGaInP	- Water Clear	700*	1195*	590*	30°
	Green	InGaN	- water Clear	700*	1295*	520*	

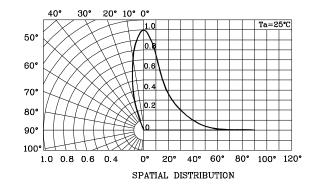
^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Jul 25.2016

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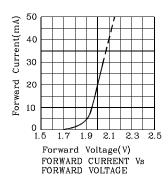


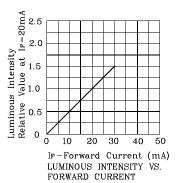


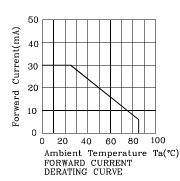


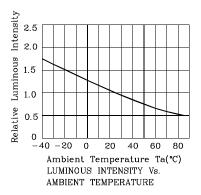


♦ Yellow

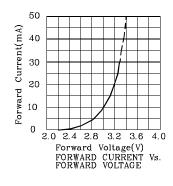


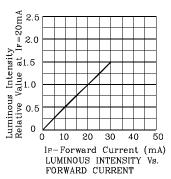


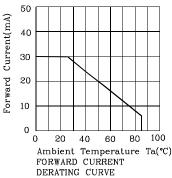


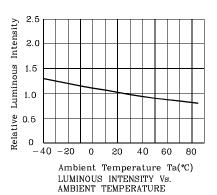


♦ Green





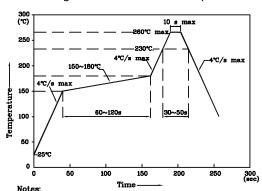






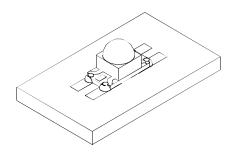
LED is recommended for reflow soldering and soldering profile is shown below.

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

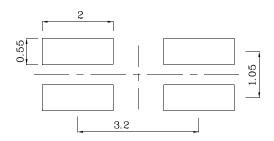


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- Do not put stress to the epoxy resin during high temperatures conditions

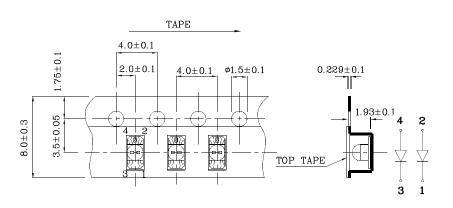
♦ The device has a single mounting surface. The device must be mounted according to the specifications.



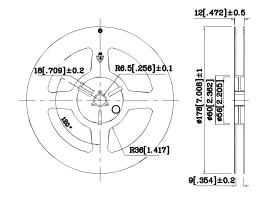
♦ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ Tape Specification (Units:mm)



❖ Reel Dimension



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:

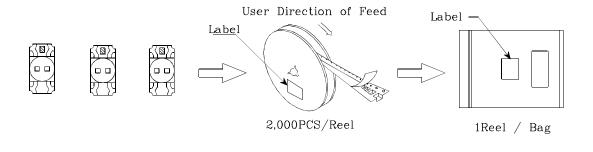
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

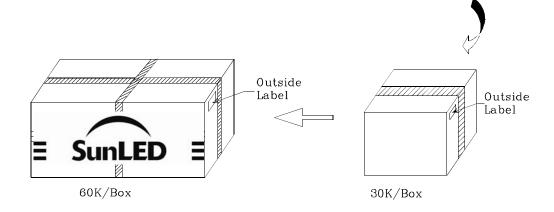
Note: Accuracy may depend on the sorting parameters.

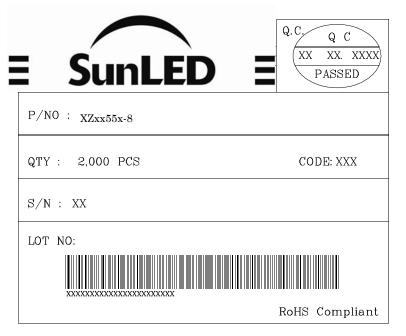




PACKING & LABEL SPECIFICATIONS







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.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet. User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 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.
- 5. The contents within this document may not be altered without prior consent by SunLED.
- $6. \ Additional \ technical \ notes \ are \ available \ at \ \underline{http://www.SunLEDusa.com/TechnicalNotes.asp}$

SDSB0050 V1-Z Layout: Maggie L.