



 $1.6 \times 0.8 \times 0.25$ mm (0603) SMD Chip LED Lamp

Features

- 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





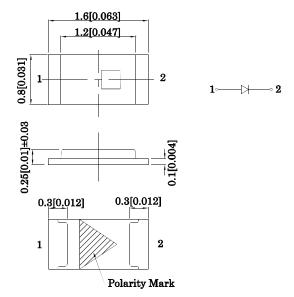


ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

Applications

- 1. Mobile phone Keypad indicator and backlight .
- 2.Flat backlight for LCD, switch and symbol.
- 3.Toys.

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 (InGaN)	Unit		
Reverse Voltage	V_{R}	5	V	
Forward Current	I_{F}	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	100	mA	
Power Dissipation	P_{D}	120	mW	
Operating Temperature	T_{A}	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	-0	
Electrostatic Discharge Threshold (HBM)		450	V	

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 (InGaN)	Unit	
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	3.2	V	
Forward Voltage (Max.) (I _F =20mA)	V_{F}	4	V	
Reverse Current (Max.) $(V_R=5V)$	I_R	50	uA	
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λΡ	520*	nm	
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λD	525*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$\triangle \lambda$	35	nm	
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	100	pF	

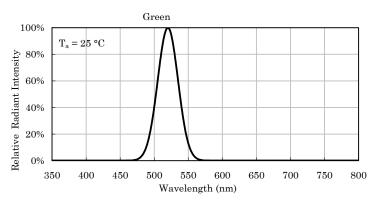
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous CIE127 (I _F =20 mo	-2007* OmA)	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZM2DG53W-6	Green	InGaN	Water Clear	700*	995*	520*	130°

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

Jan 05,2017



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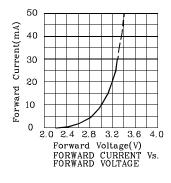
40° 30° 20° 10° 0°

50°
60°
0.8
0.8
0.8
0.2
90°
1.0 0.8 0.6 0.4 0° 20° 40° 60° 80° 100° 120°

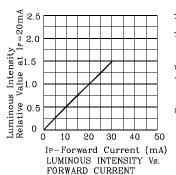
SPATIAL DISTRIBUTION

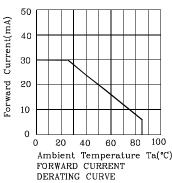
Relative Intensity Vs. CIE Wavelength

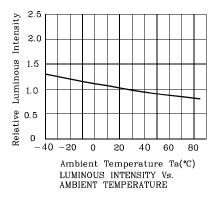
❖ Green



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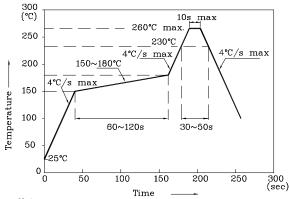






LED is recommended for reflow soldering and soldering profile is shown below.

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



Notes:

- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 245°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

Jan 05,2017

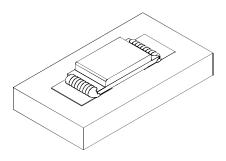
XDSB5729 V5-Z Layout: Maggie L.

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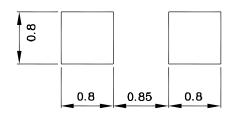




❖ The device has a single mounting surface. The device must be mounted according to the specifications.

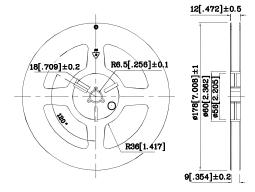


❖ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

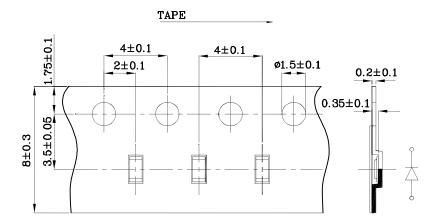


Mask open area ratio:80% Mask thickness:80~100um

❖ Reel Dimension



❖ Tape Specification (Units:mm)

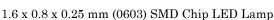


Remarks:

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:

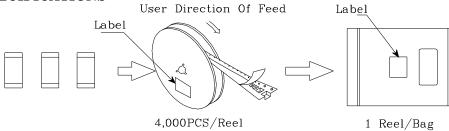
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

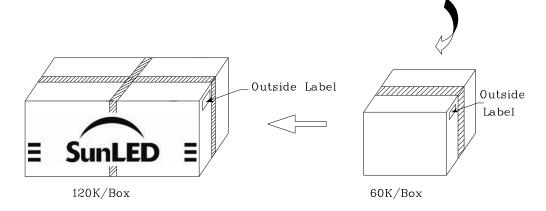
Note: Accuracy may depend on the sorting parameters.

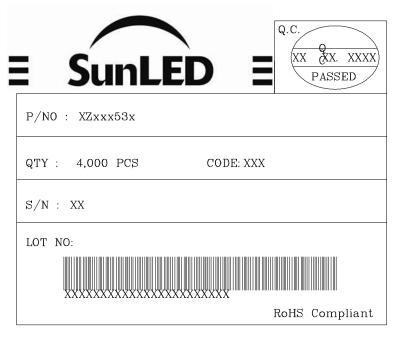




PACKING & LABEL SPECIFICATIONS







TERMS OF

USE

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Jan 05,2017 XDSB5729 V5-Z Layout: Maggie L.