

### Part Number: XZM2DG53W-8

1.6 x 0.8mm SMD Chip LED Lamp

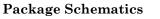
#### Features

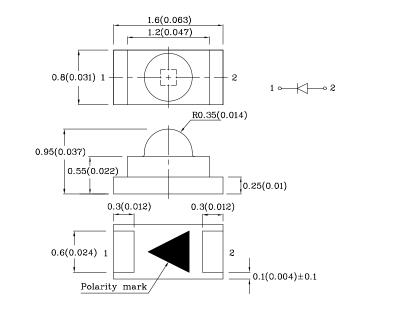
- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- Halogen-free
- RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES







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 <sub>A</sub> =25°C)	Green (InGaN)	Unit		
Reverse Voltage		5	V	
Forward Current	$\mathbf{I}_{\mathbf{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	100	mA	
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	120	mW	
Operating Temperature	TA	$-40 \sim +85$	°C	
Storage Temperature	Tstg	$-40 \sim +85$	Ċ	
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 <sub>A</sub> =25°C)		Green (InGaN)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	3.2	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	4	V	
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	50	μΑ	
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λP	520*	nm	
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	525*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	35	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	100	pF	

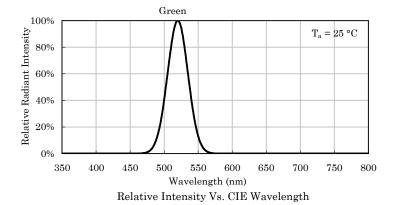
Part Number	Emitting Color	Emitting Material	Lens-color	CIE127 (I <sub>F</sub> =2	s Intensity 7-2007* 0mA) cd	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZM2DG53W-8	Green	InGaN	Water Clear	1000*	1495*	520*	60°

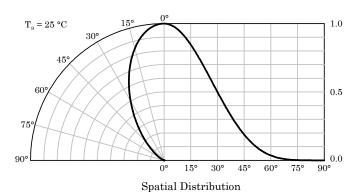
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Nov 27,2020

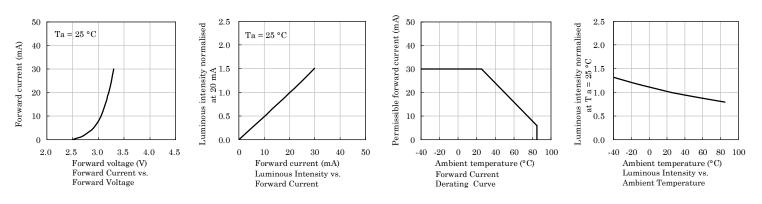
XDSB4827 V8-Z Layout: Maggie L.



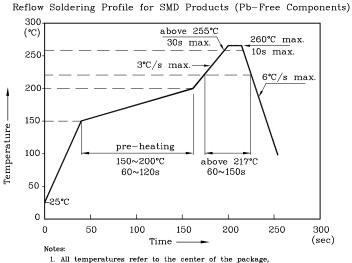




Green



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



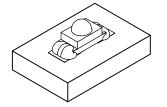
1. All temperatures refer to the center of the package, measured on the package body surface facing up during reflow. 2. Do not apply any stress to the LED during high temperature conditions. 3. Maximum number of soldering passes: 2

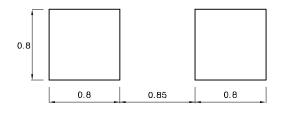


 $1.6 \ge 0.8 \text{mm}$  SMD Chip LED Lamp

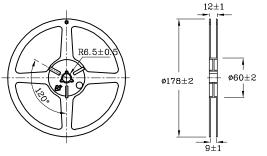
✤ The device has a single mounting surface. The device must be mounted according to the specifications.

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

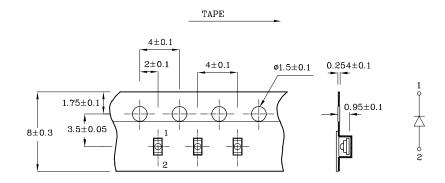




Reel Dimension (Units : mm)



# 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:

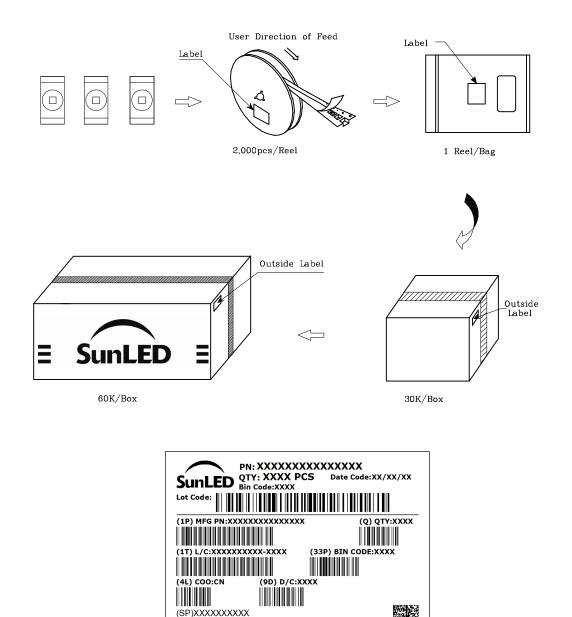
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%

3. Forward Voltage: +/-0.1V  $\,$ 

Note: Accuracy may depend on the sorting parameters.



# **PACKING & LABEL SPECIFICATIONS**



RoHS Compliant Made in China

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