SunLED
www.SunLEDusa.com

Part Number: XZM2DG53W-6

1.6 x 0.8 x 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
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

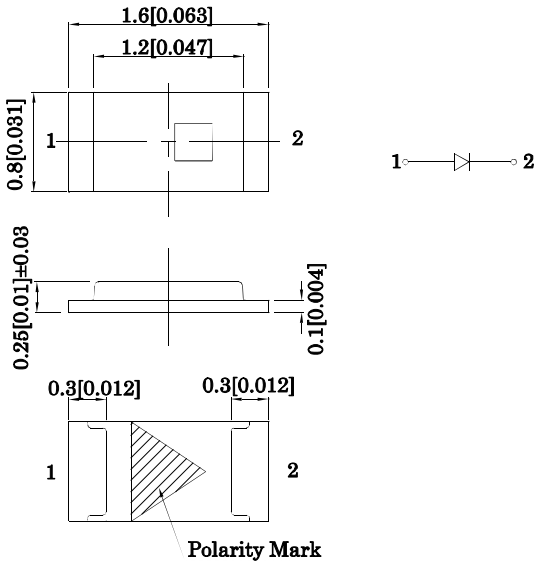
Applications

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 ±0.1(0.004") unless otherwise noted.
3. Specifications are subject to change without notice.

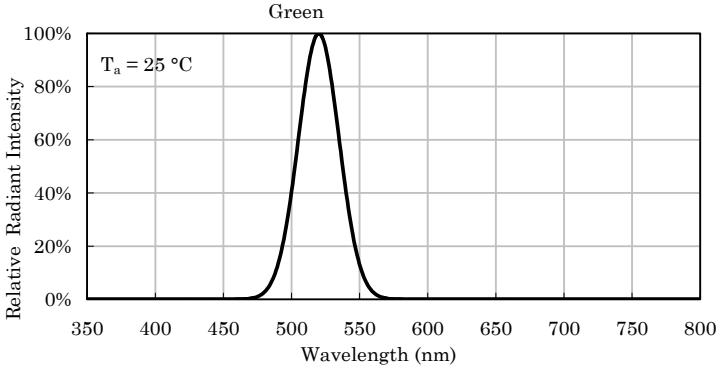
Absolute Maximum Ratings (T_A=25°C)		**Green (InGaN)**	**Unit**
Reverse Voltage	V_R	5	V
Forward Current	I_F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	100	mA
Power Dissipation	P_D	120	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Electrostatic 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)

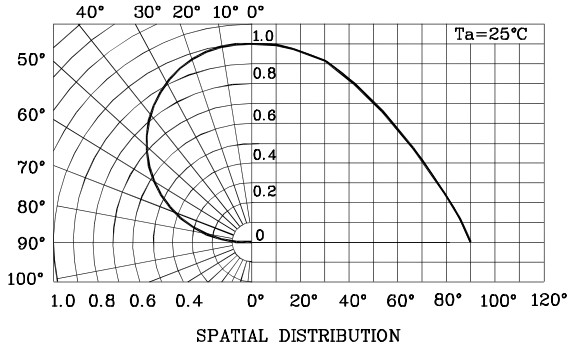
Operating Characteristics (T_A=25°C)		**Green (InGaN)**	**Unit**
Forward Voltage (Typ.) (I_F=20mA)	V_F	3.2	V
Forward Voltage (Max.) (I_F=20mA)	V_F	4	V
Reverse Current (Max.) (V_R=5V)	I_R	50	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I_F=20mA)	λP	520*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I_F=20mA)	λD	525*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I_F=20mA)	△λ	35	nm
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	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 2θ 1/2
				min.	typ.		
XZM2DG53W-6	Green	InGaN	Water Clear	700*	995*	520*	130°

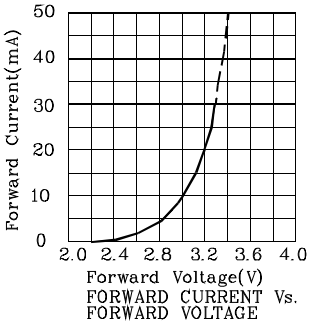
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

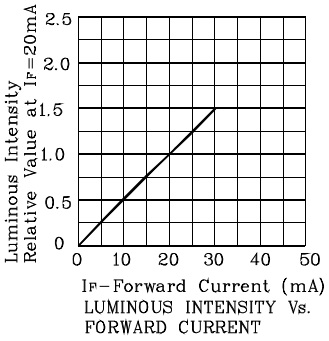


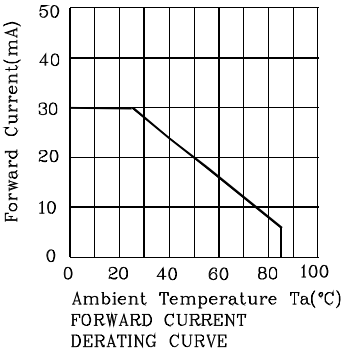
Relative Intensity Vs. CIE Wavelength

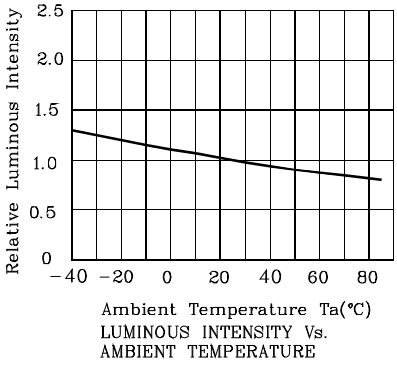


❖ Green



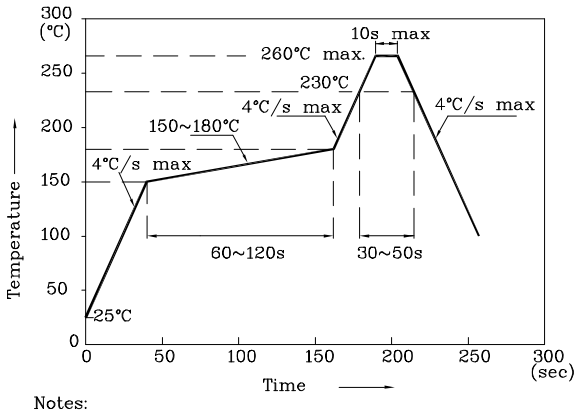






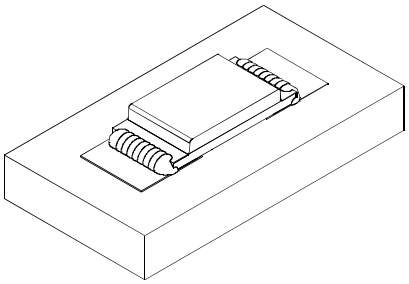
LED is recommended for reflow soldering and soldering profile is shown below.

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

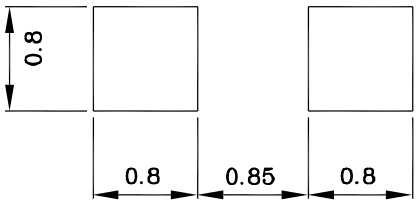


Notes:
1. Maximum soldering temperature should not exceed 260°C
2. Recommended reflow temperature: 245°C−260°C
3. Do not put stress to the epoxy resin during high temperatures conditions

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

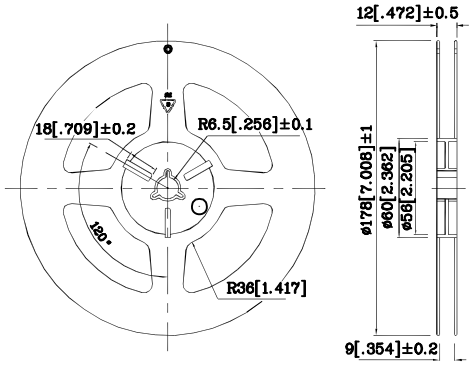


❖ **Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)**

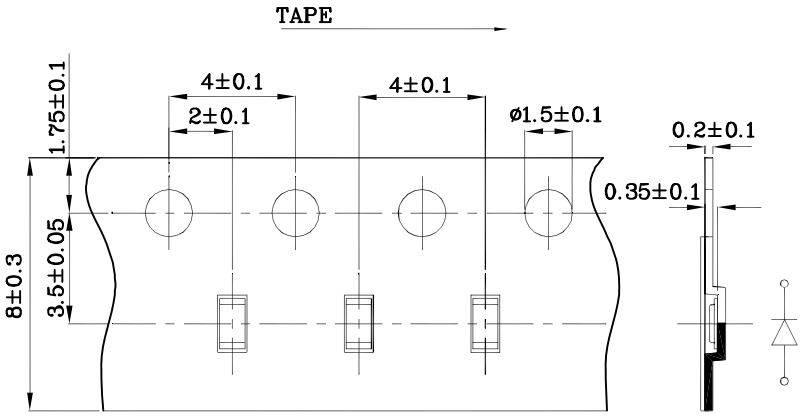


Mask open area ratio:80%
Mask thickness:80~100um

❖ **Reel Dimension**



❖ **Tape Specification (Units : mm)**



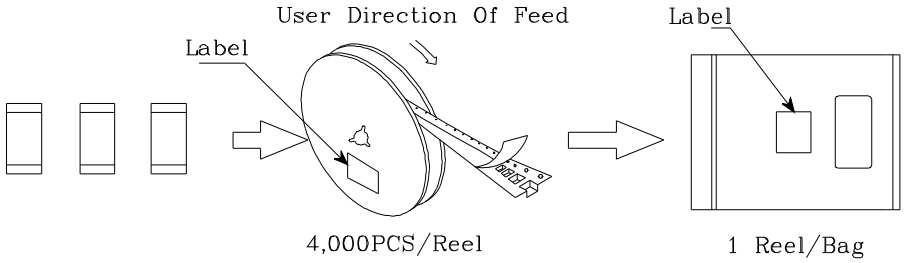
Remarks:

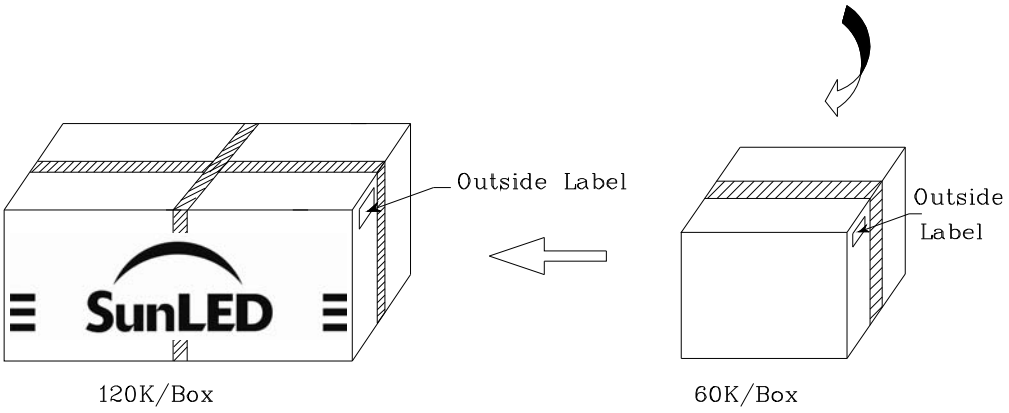
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

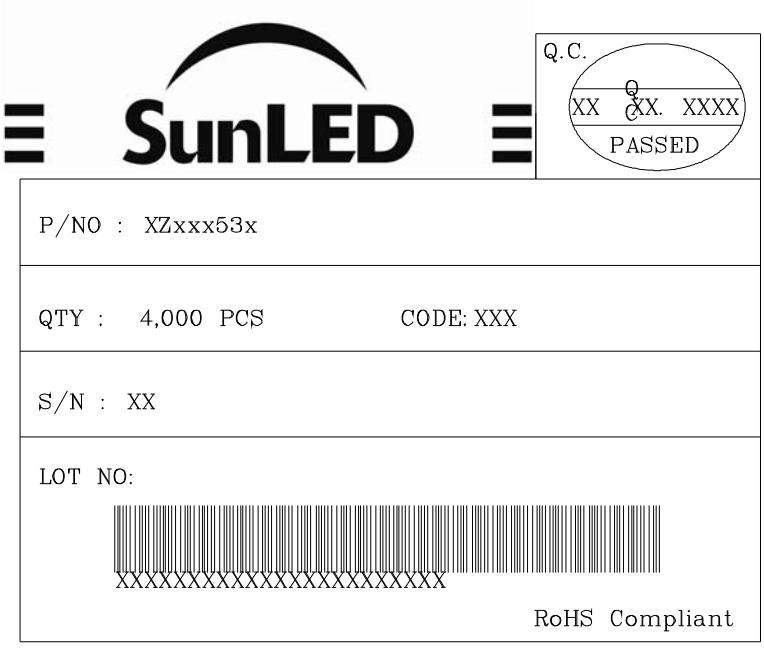
1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS







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