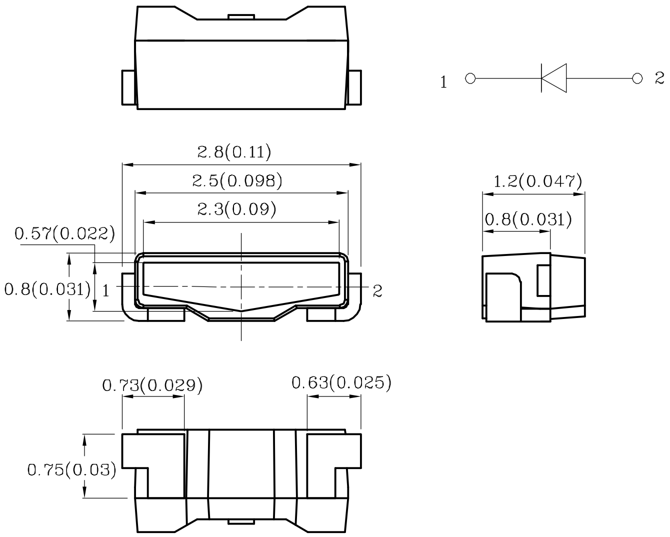
Features

- 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 ±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	μA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I_F=20mA)	λP	520*	nm
Wavelength of Dominant EmissionCIE127-2007* (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

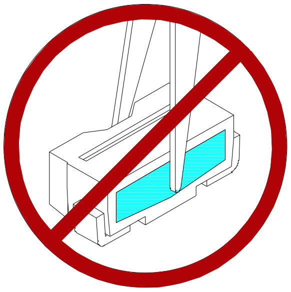
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I_F=20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 2θ 1/2
				min.	typ.		
XZM2DG81FS	Green	InGaN	Water Clear	1000*	1395*	520*	110°

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

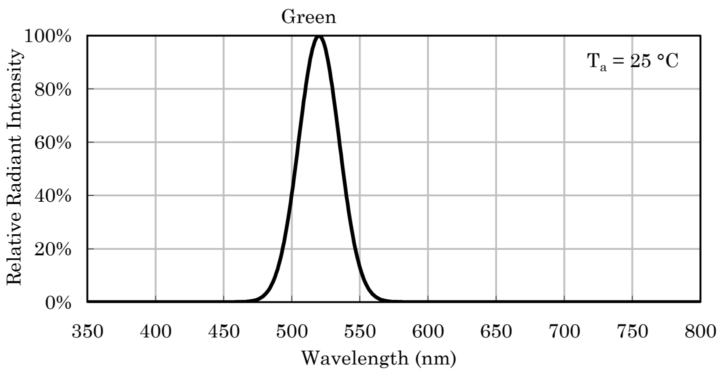
Handling Precautions

Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force.
As a result, special handling precautions need to be observed during assembly using silicone encapsulated LED products. Failure to comply might lead to damage and premature failure of the LED.

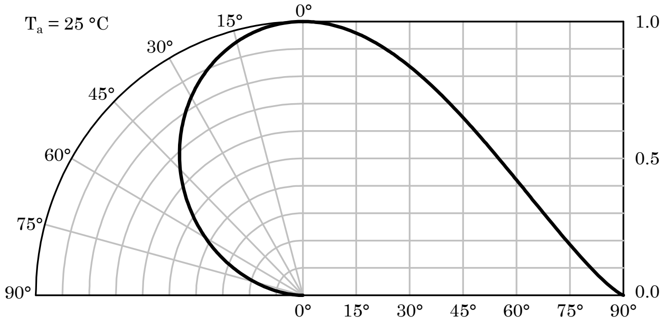
1.Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry.



2. As silicone encapsulation is permeable to gases, some corrosive substances such as H_2S might corrode silver plating of leadframe. Special care should be taken if an LED with silicone encapsulation is to be used near such substances.

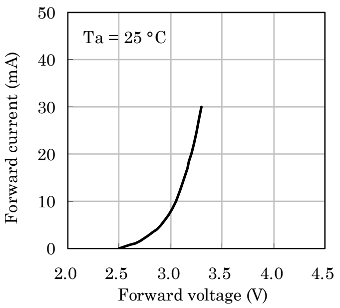


Relative Intensity Vs. CIE Wavelength

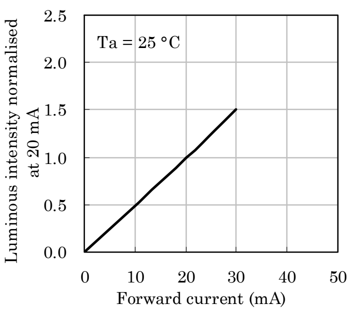


Spatial Distribution

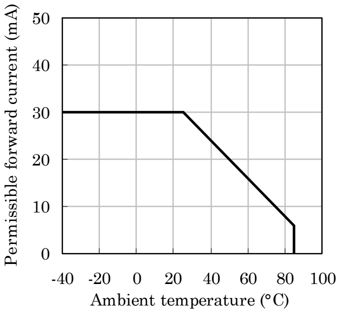
❖ Green



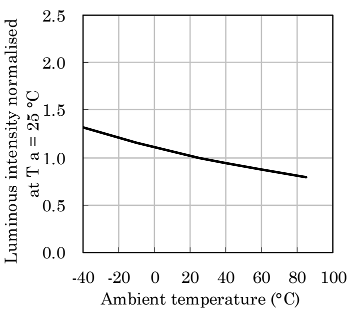
Forward Current vs.
Forward Voltage



Luminous Intensity vs.
Forward Current



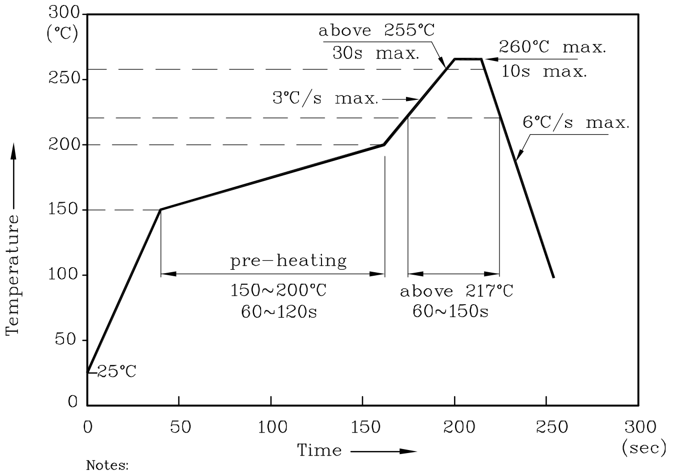
Forward Current
Derating Curve



Luminous Intensity vs.
Ambient Temperature

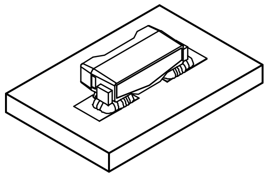
LED is recommended for reflow soldering and soldering profile is shown below.

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

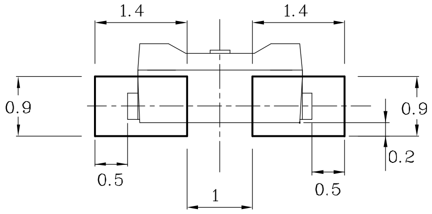


Notes:
1. All temperatures refer to the center of the package, measured on the package body surface facing up during reflow.
2. Do not apply any stress to the LED during high temperature conditions.
3. Maximum number of soldering passes: 2

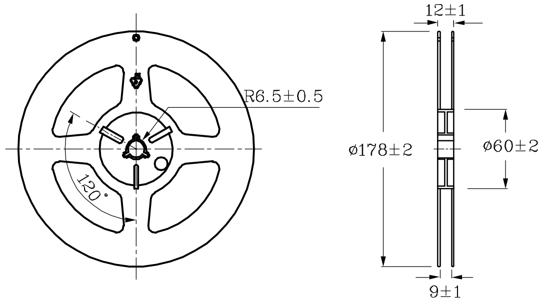
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



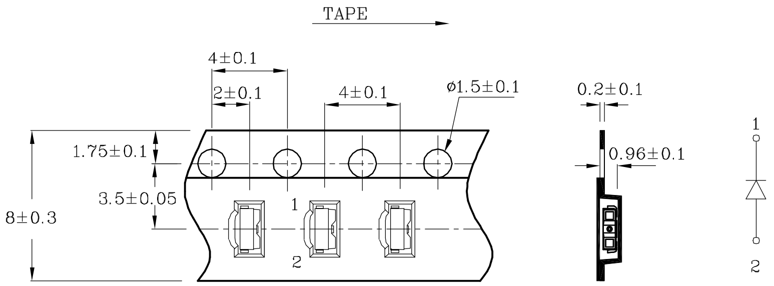
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



❖ Reel Dimension (Units : mm)



❖ Tape Specification (Units : mm)



Remarks:

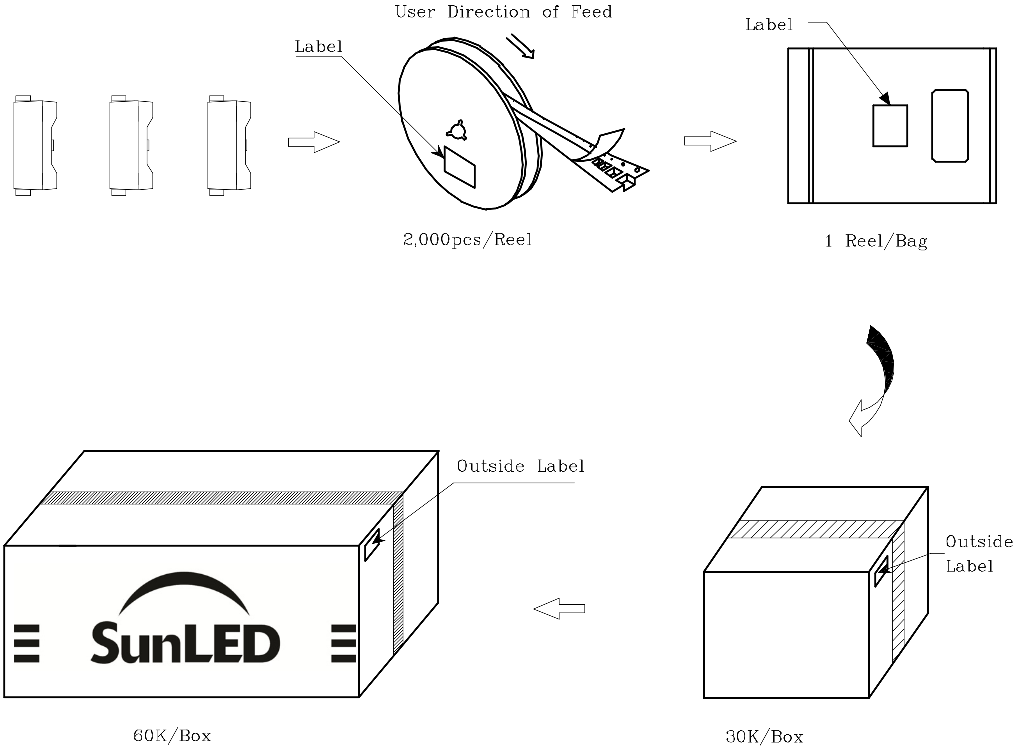
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength),

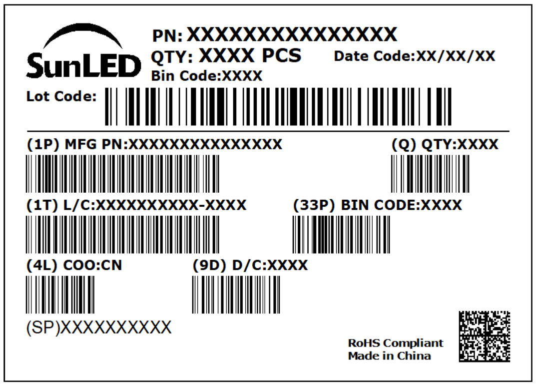
the typical accuracy of the sorting process is as follows:

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





SunLED
PN: XXXXXXXXXXXXXXX
QTY: XXXX PCS Date Code:XX/XX/XX
Bin Code:XXXX
Lot Code:
(1P) MFG PN:XXXXXXXXXXXXXXX (Q) QTY:XXXX
(1T) L/C:XXXXXXXXXX-XXXX (33P) BIN CODE:XXXX
(4L) COO:CN (9D) D/C:XXXX
(SP)XXXXXXXXXX
RoHS Compliant
Made in China

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2. Contents within this document are subject to improvement and enhancement changes without notice.
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