

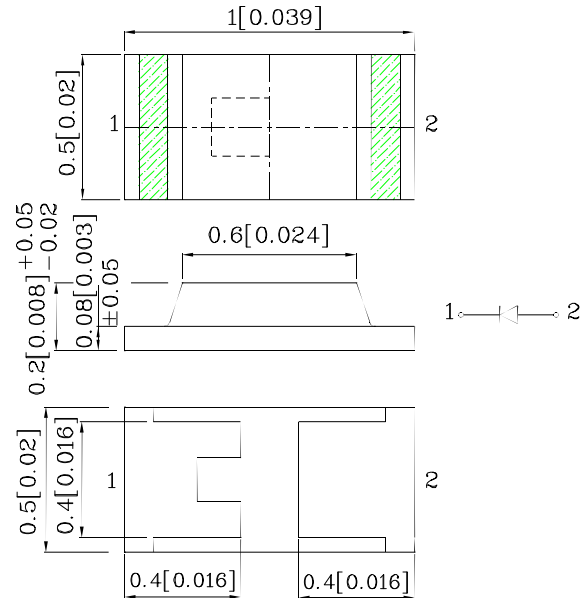
Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 4,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- Low current $I_F=5\text{mA}$ operating.
- RoHS compliant



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

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.

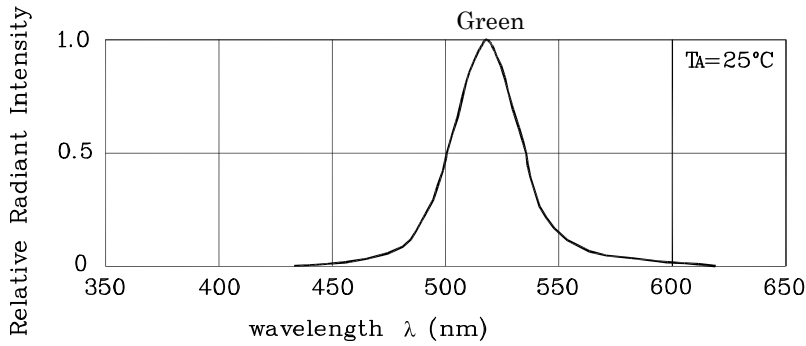
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)		Green (InGaN)	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	10	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	50	mA
Electrostatic Discharge Threshold (HBM)		1000	V
Power Dissipation	P_D	34	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	T_{stg}	-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)

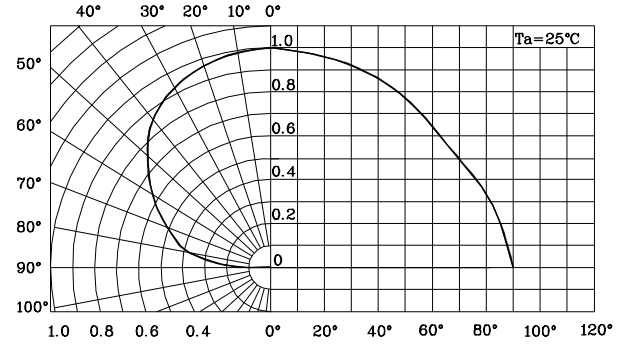
Operating Characteristics ($T_A=25^\circ\text{C}$)		Green (InGaN)	Unit
Forward Voltage (Typ.) ($I_F=5\text{mA}$)	V_F	3	V
Forward Voltage (Max.) ($I_F=5\text{mA}$)	V_F	3.2	V
Reverse Current (Max.) ($V_R=5\text{V}$)	I_R	50	μA
Wavelength of Peak Emission CIE127-2007* (Typ.) ($I_F=5\text{mA}$)	λ_P	518*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) ($I_F=5\text{mA}$)	λ_D	527*	nm
Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=5\text{mA}$)	$\Delta\lambda$	35	nm

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* ($I_F=5\text{mA}$) mcd		Wavelength CIE127-2007* nm λ_P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZBGR68W5MAV-3	Green	InGaN	Water Clear	30*	69*	518*	140°

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

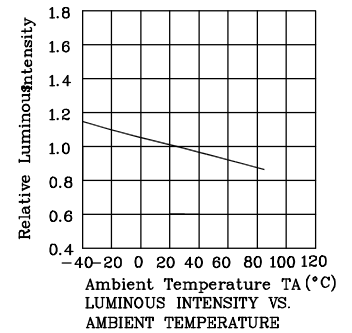
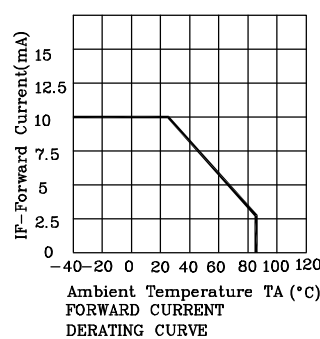
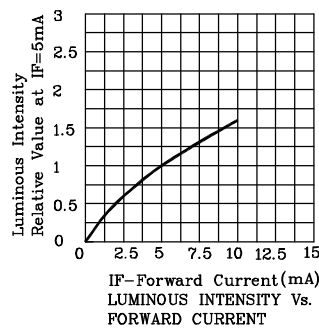
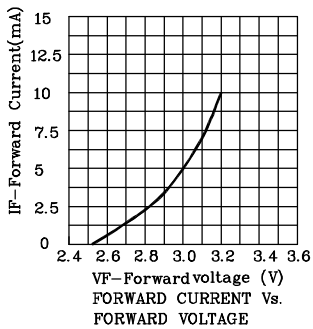


RELATIVE INTENSITY Vs. CIE WAVELENGTH



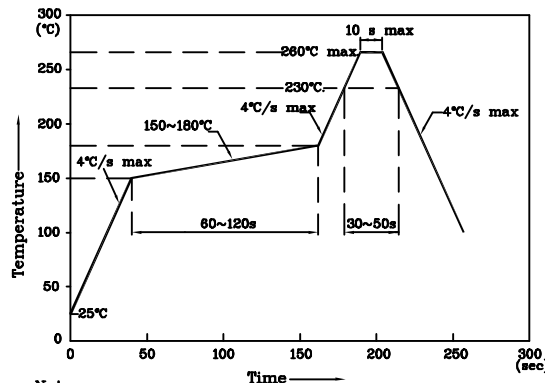
SPATIAL DISTRIBUTION

❖ Green



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

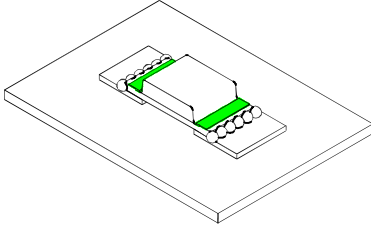
Reflow Soldering Profile for SMD Products (Pb-Free Components)



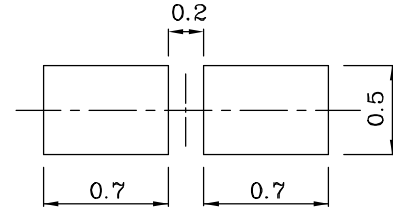
- Notes:
1. Maximum soldering temperature should not exceed 280°C
 2. Recommended reflow temperature: 145°C-260°C
 3. Do not put stress to the epoxy resin during high temperatures conditions



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

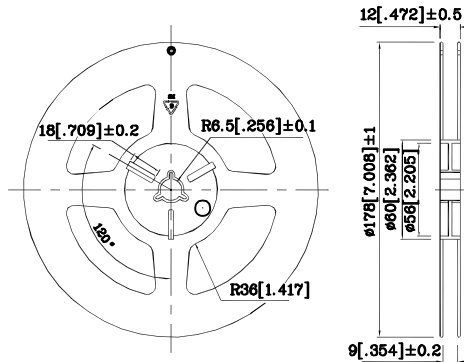


❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)

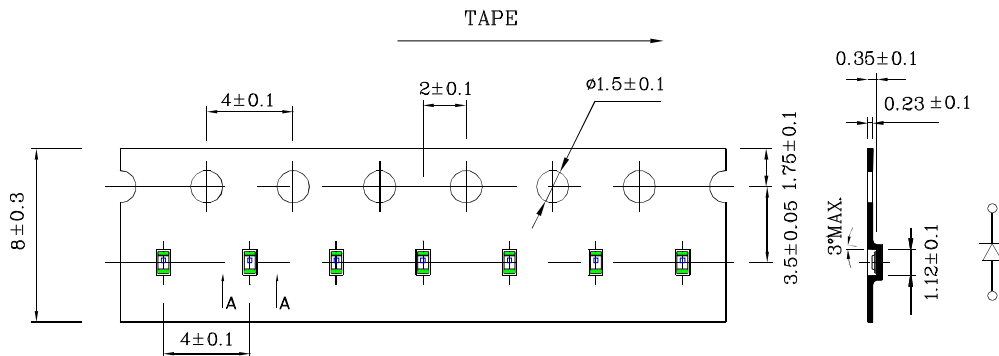


Mask open area ratio:80%
Mask thickness:80~100um

❖ 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.

