

Features

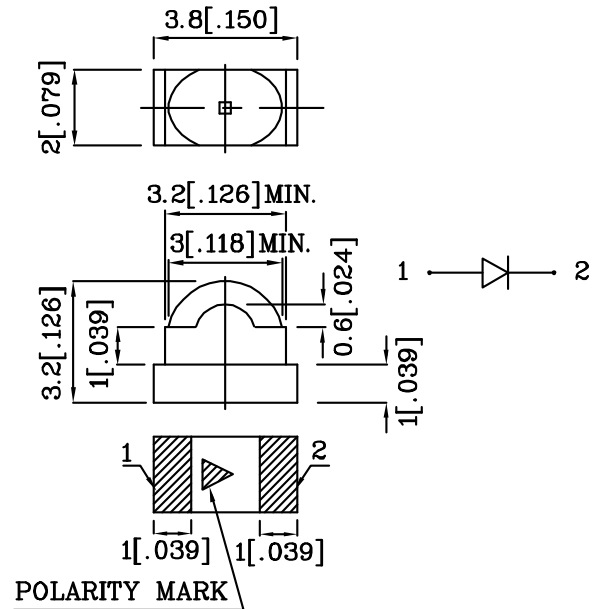
- 3.8mmx2.0mm SMT LED, 3.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 500PCS / REEL.
- RoHS COMPLIANT.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Notes:

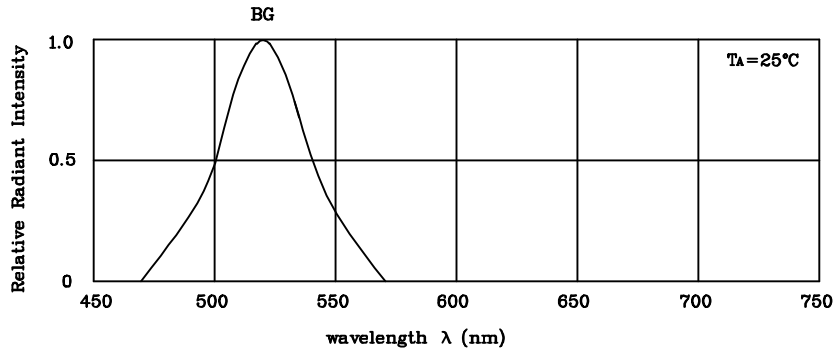
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ unless otherwise noted.



Absolute maximum ratings (TA=25°C)		BG (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}	150	mA
Power Dissipation	P _T	105	mW
Operating Temperature	T _A	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)		1000	V

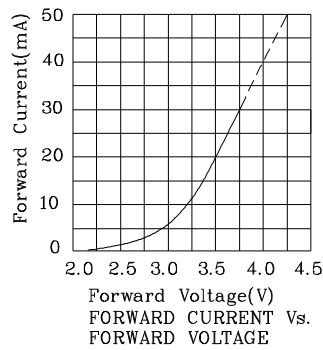
Operating Characteristics (TA=25°C)		BG (InGaN)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	3.5	V
Forward Voltage (Max.) (I _F =20mA)	V _F	4.5	V
Reverse Current (V _R =5V)	I _R	10	µA
Wavelength of Peak Emission (I _F =20mA)	λ _p	520	nm
Wavelength of Dominant Emission (I _F =20mA)	λ _D	525	nm
Spectral Line Full Width At Half-Maximum (I _F =20mA)	Δλ	38	nm
Capacitance (V _F =0V, f=1MHz)	C	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I _F =20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZBG79W	Green	InGaN	Water Clear	180	447	520	60° (H) 35° (V)

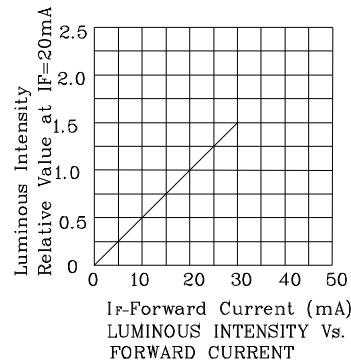


RELATIVE INTENSITY Vs. WAVELENGTH

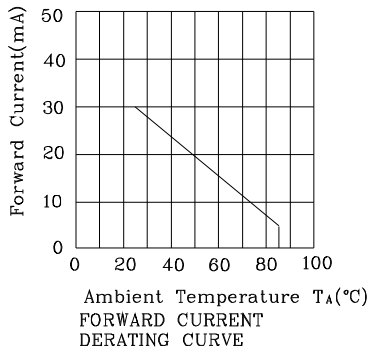
❖ BG



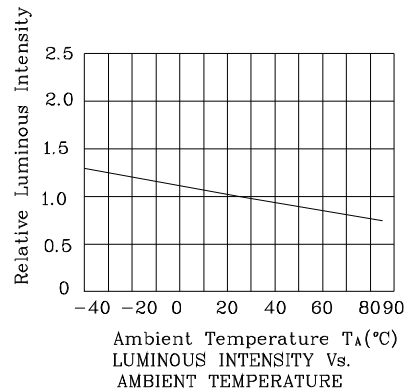
FORWARD CURRENT Vs. FORWARD VOLTAGE



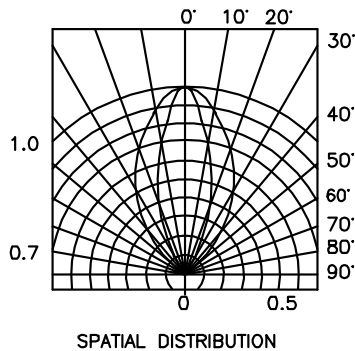
LUMINOUS INTENSITY Vs. FORWARD CURRENT



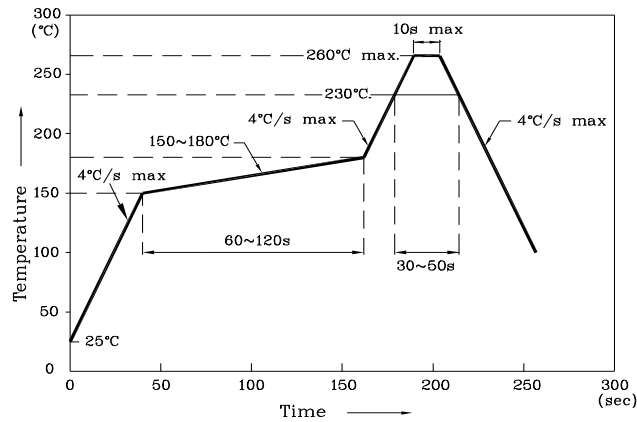
FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



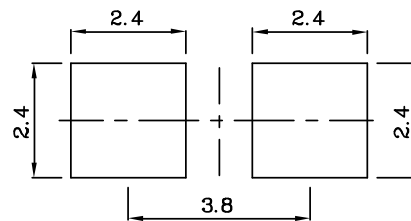
Reflow Soldering Profile For Lead-free SMT Process.



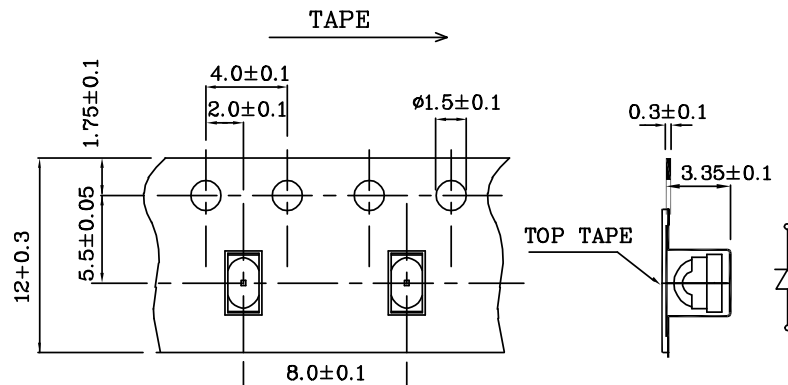
Notes:

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

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



❖ Tape Specification (Units : mm)



Remarks:

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

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

Note: Accuracy may depend on the sorting parameters.