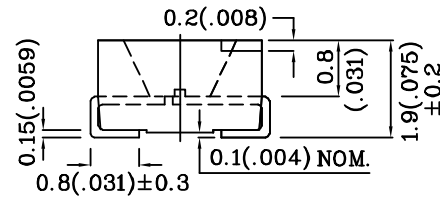
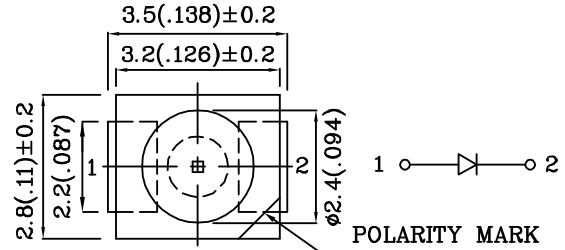


### Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 1500PCS / REEL.
- Electrostatic Discharge Classification: Class 1/HBM(MIL-STD-883METHOD3015.7)
- RoHS COMPLIANT.



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES



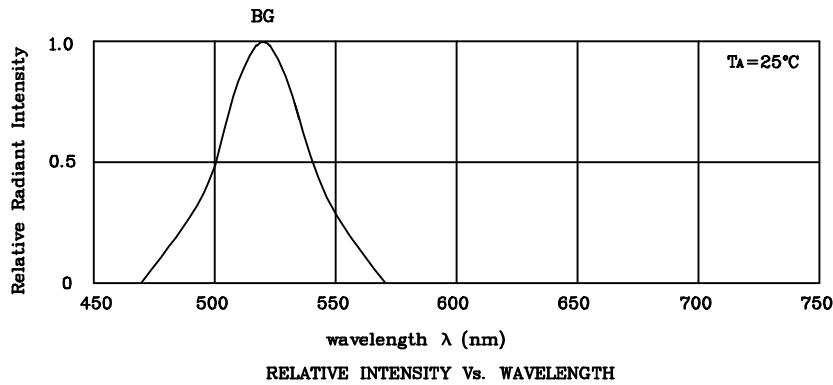
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25(0.01") unless otherwise noted.

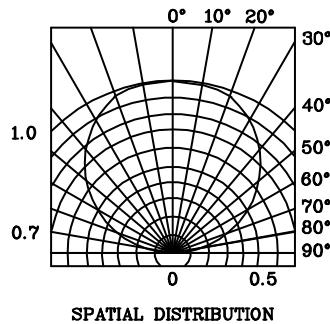
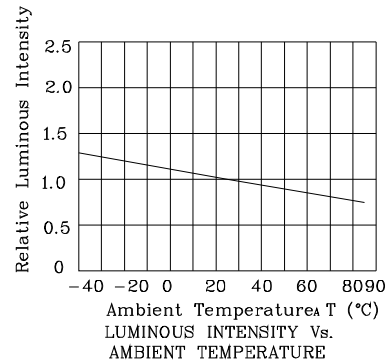
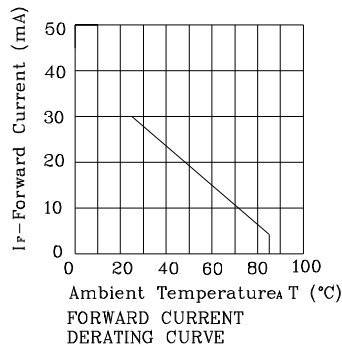
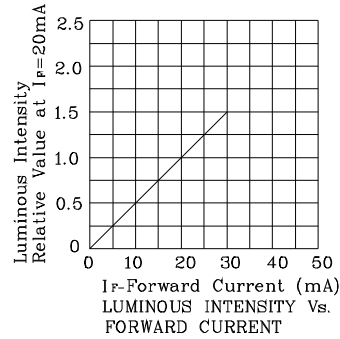
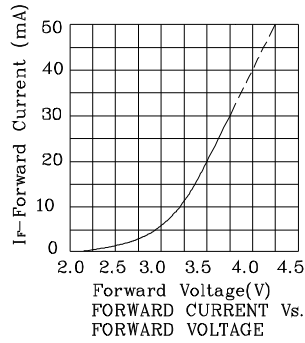
Absolute Maximum Ratings (TA=25°C)		BG (InGaN)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	150	mA
Power Dissipation	P <sub>T</sub>	135	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	

Operating Characteristics (TA=25°C)		BG (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	3.5	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	4.5	V
Reverse Current (V <sub>R</sub> =5V)	I <sub>R</sub>	10	uA
Wavelength of Peak Emission (I <sub>F</sub> =20mA)	λ peak	520	nm
Wavelength of Dominant Emission (I <sub>F</sub> =20mA)	λ D	525	nm
Spectral Line Full Width At Half-Maximum(I <sub>F</sub> =20mA)	Δλ	38	nm
Capacitance (V <sub>F</sub> =0V, f=1MHz)	C	45	pF

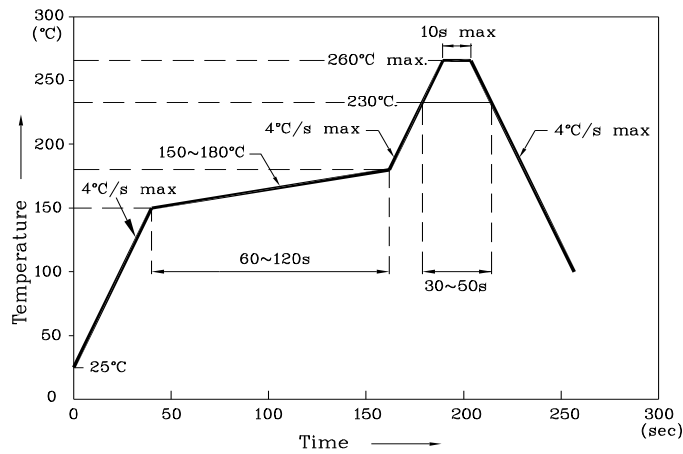
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZBG45W	Green	InGaN	Water Clear	110	218	520	120°



❖ BG



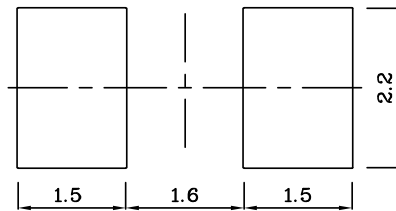
Reflow Soldering Profile For Lead-free SMT Process.



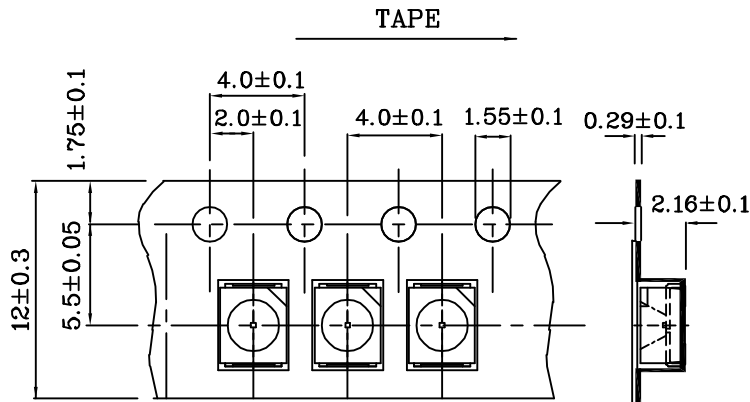
Notes:

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.