

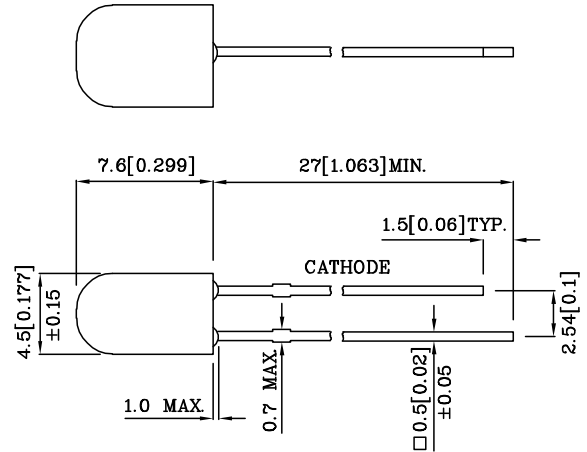
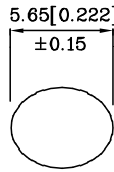
PRELIMINARY SPEC

**Features**

- ULTRA BRIGHTNESS.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.
- RoHS COMPLIANT.



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



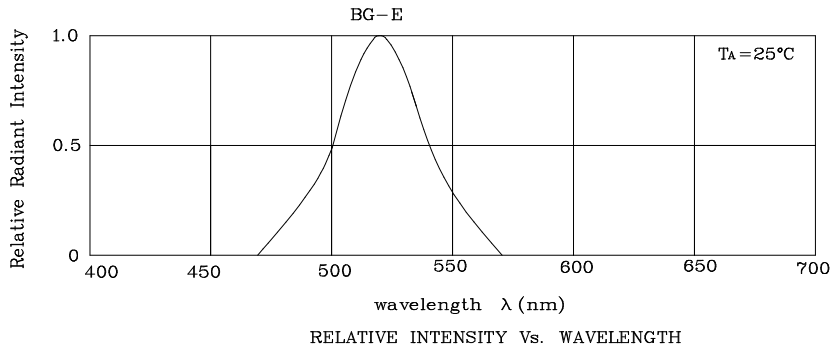
Notes:

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

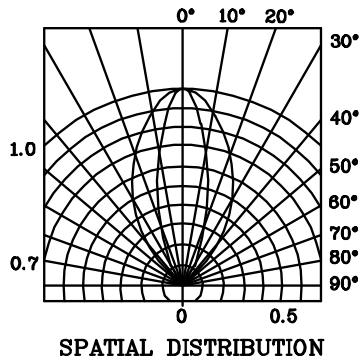
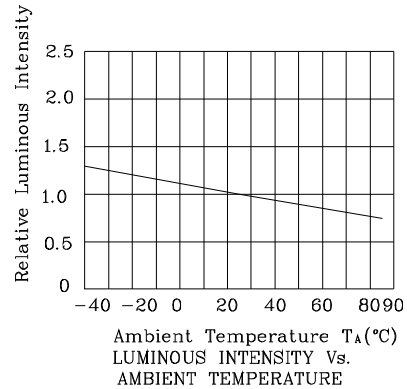
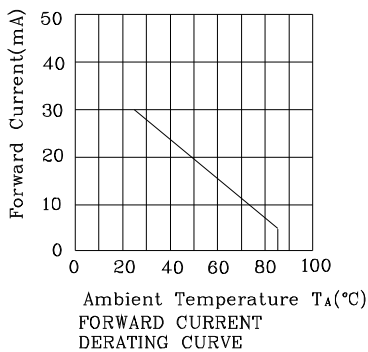
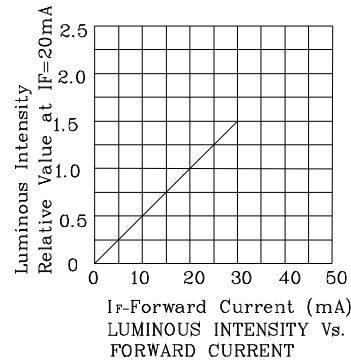
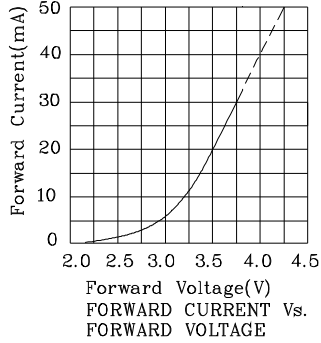
Absolute Maximum Ratings (TA=25°C)		BG-E (InGaN)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	150	mA
Power Dissipation	P <sub>T</sub>	120	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)	1000		V
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds		
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds		

Operating Characteristics (TA=25°C)		BG-E (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 <sub>P</sub>	518	nm
Wavelength of Dominant Emission (I <sub>F</sub> =20mA)	λ <sub>D</sub>	525	nm
Spectral Line Full Width At Half-Maximum (I <sub>F</sub> =20mA)	Δλ	36	nm
Capacitance (V <sub>F</sub> =0V, f=1MHz)	C	50	pF

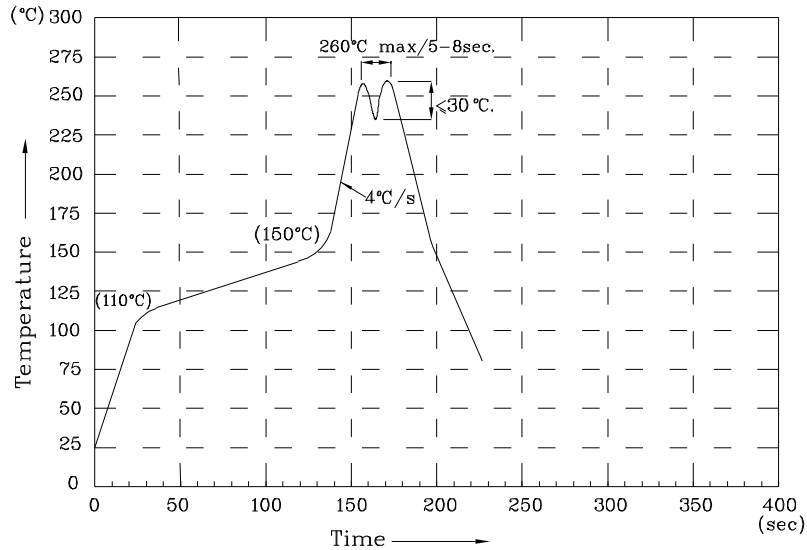
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λ <sub>P</sub>	Viewing Angle 2 θ 1/2
				min.	typ.		
XLBGE08W	Green	InGaN	Water Clear	480	995	518	30°(H) 60°(V)



❖ BG-E



Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

- 1.Recommend the wave temperature 245°C~260°C.The maximum soldering temperature should be less than 260°C.
- 2.Do not apply stress on epoxy resins when temperature is over 85 degree°C.
- 3.The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
- 4.No more than once.

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.