

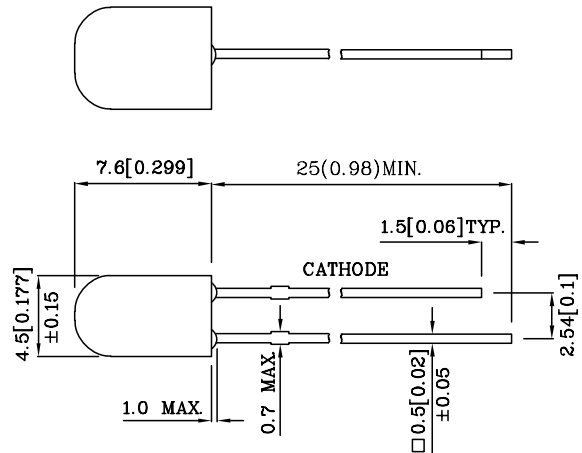
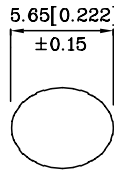
PRELIMINARY SPEC

**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



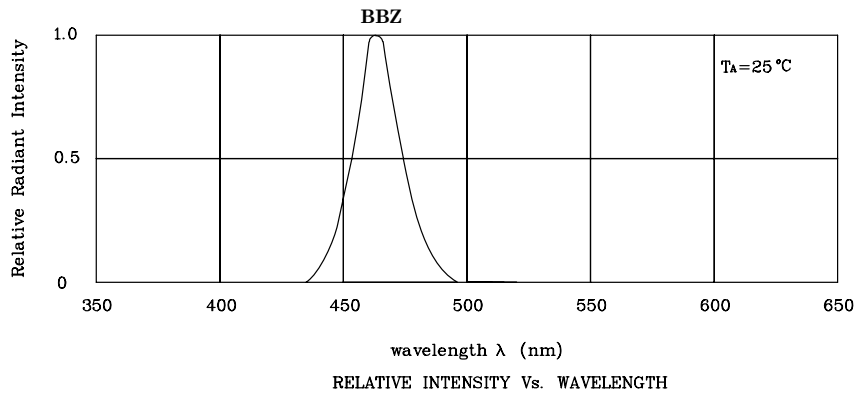
Notes:

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

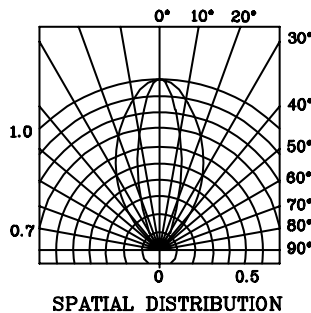
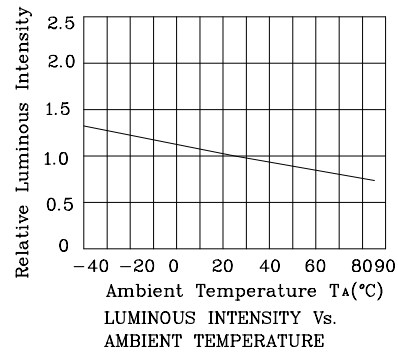
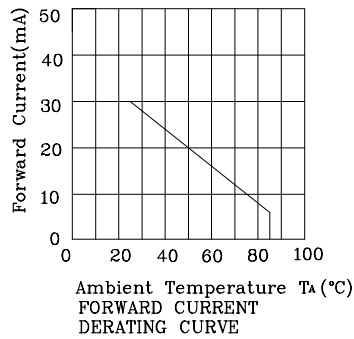
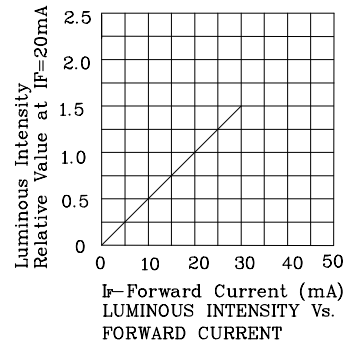
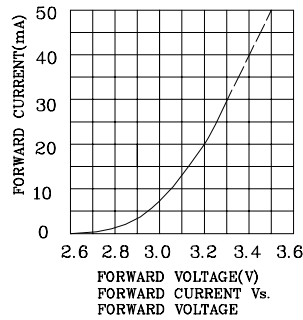
Absolute Maximum Ratings (TA=25°C)		BBZ (InGaN)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	100	mA
Power Dissipation	PT	111	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Electrostatic Discharge Threshold (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)		BBZ (InGaN)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	3.2	V
Forward Voltage (Max.) (IF=20mA)	VF	3.7	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λ P	458	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λ D	465	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	22	nm
Capacitance (VF=0V, f=1MHz)	C	110	pF

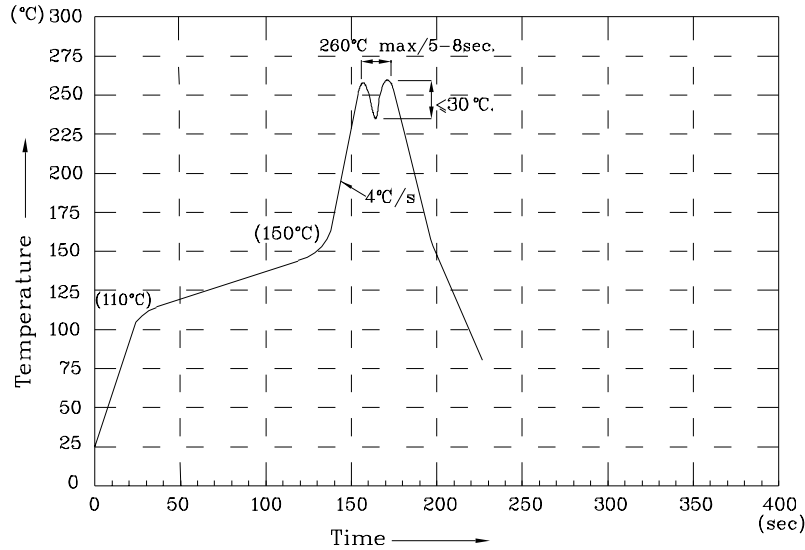
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) med		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XLBBZ08W	Blue	InGaN	Water Clear	900	1990	458	30°(H) 60°(V)



❖ **BBZ**



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 / 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.