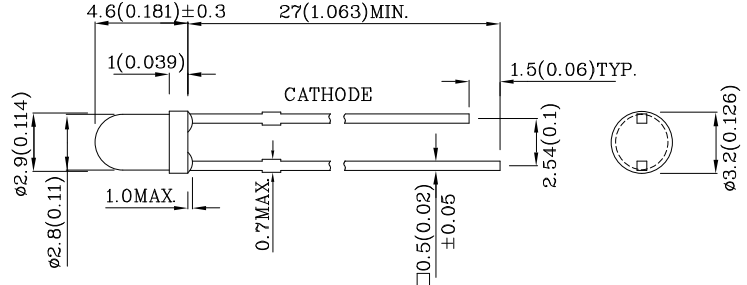


PRELIMINARY SPEC

**Features**

- LOW POWER CONSUMPTION.
- POPULAR T-1 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.
- RoHS COMPLIANT.



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

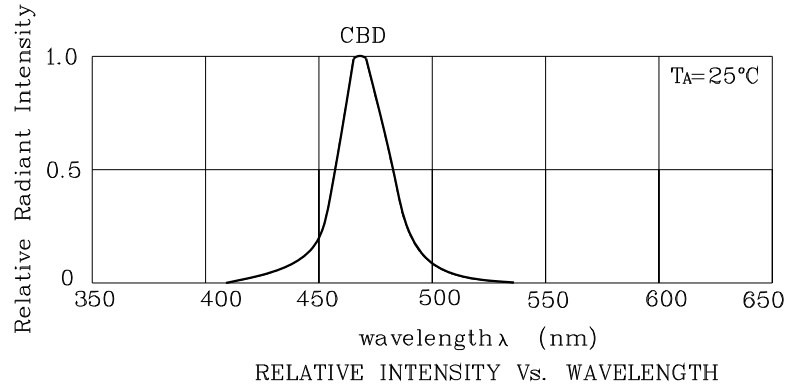
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. Specifications are subject to change without notice.

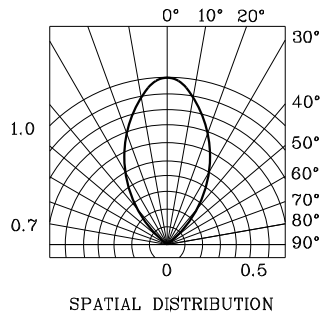
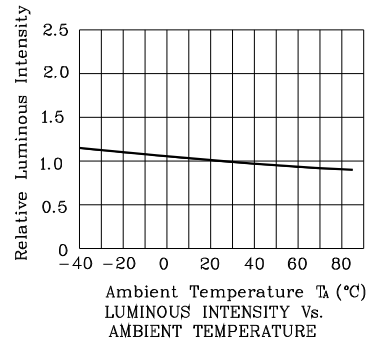
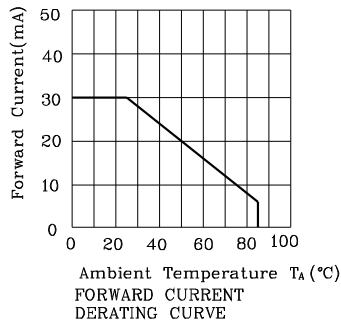
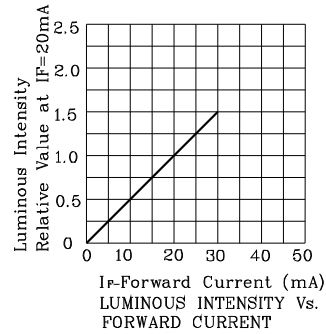
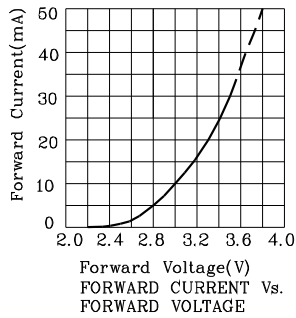
Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		CBD (AlInGaN)	Unit
Reverse Voltage	$V_R$	5	V
Forward Current	$I_F$	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{FS}$	150	mA
Power Dissipation	$P_T$	120	mW
Operating Temperature	$T_A$	-40 ~ +85	°C
Storage Temperature	$T_{stg}$	-40 ~ +85	
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 ( $T_A=25^\circ\text{C}$ )		CBD (AlInGaN)	Unit
Forward Voltage (Typ.) ( $I_F=20\text{mA}$ )	$V_F$	3.3	V
Forward Voltage (Max.) ( $I_F=20\text{mA}$ )	$V_F$	4.0	V
Reverse Current (Max.) ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength Of Peak Emission (Typ.) ( $I_F=20\text{mA}$ )	$\lambda_P$	468	nm
Wavelength Of Dominant Emission (Typ.) ( $I_F=20\text{mA}$ )	$\lambda_D$	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) ( $I_F=20\text{mA}$ )	$\Delta\lambda$	25	nm
Capacitance (Typ.) ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	100	pF

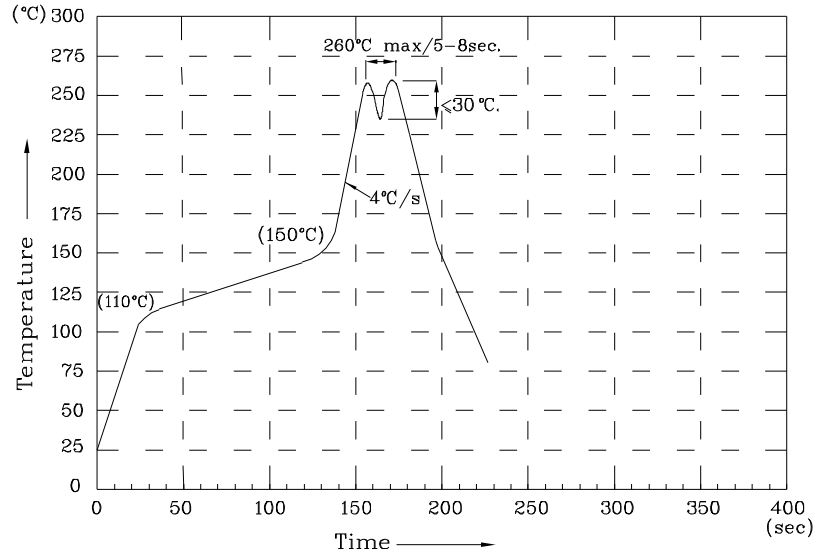
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta$ 1/2
				min.	typ.		
XLCBD111W	Blue	AlInGaN	Water Clear	380	1195	468	60°



❖ CBD



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.