

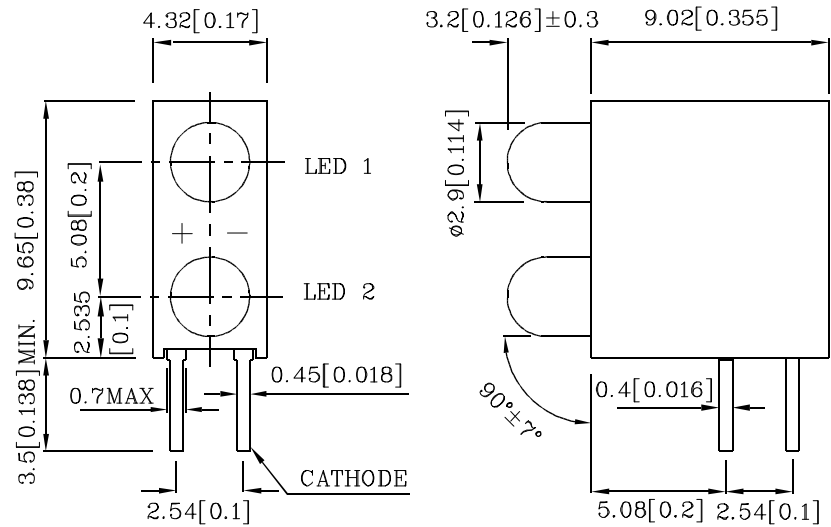
### Features

- Housing material: Type 66 Nylon
- Black casing provides superior contrast
- Housing UL rating: 94V-0
- Reliable & robust
- Custom color combinations available
- RoHS Compliant



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

### Package Schematics



#### Notes:

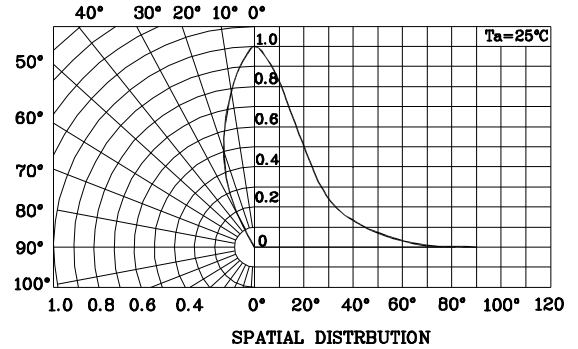
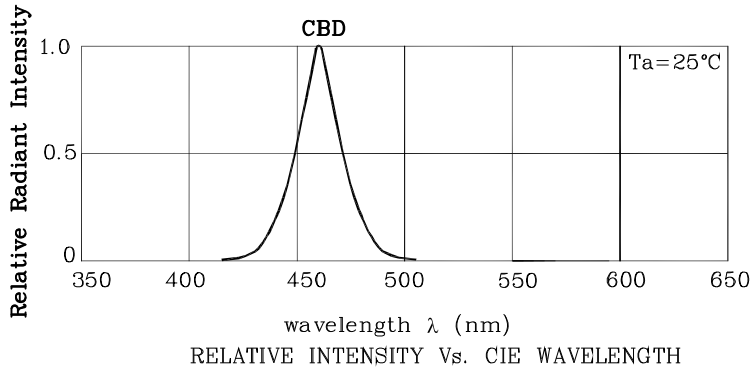
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		CBD (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>D</sub>	120	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)		250	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		

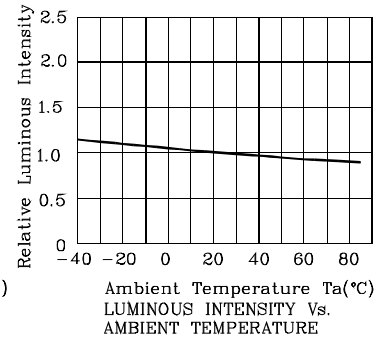
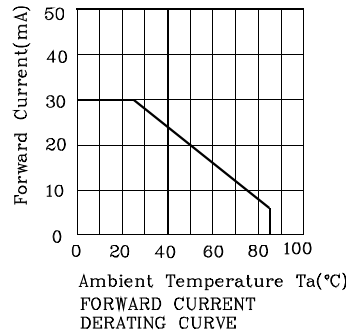
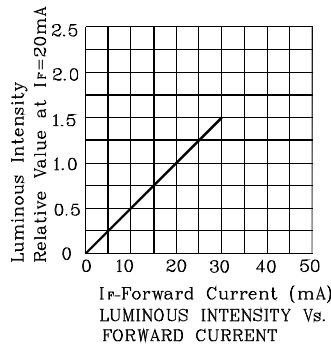
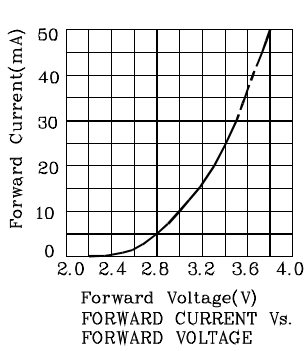
Operating Characteristics (T <sub>A</sub> =25°C)		CBD (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	3.3	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	4	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	50	uA
Wavelength of Peak Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λ <sub>P</sub>	468 460*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λ <sub>D</sub>	470 465*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	25	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* λ <sub>P</sub> nm	Viewing Angle 2θ 1/2
				min.	typ.		
XVG2LCBD147D	Blue	InGaN	Blue Diffused	500*	850*	468 460*	40°

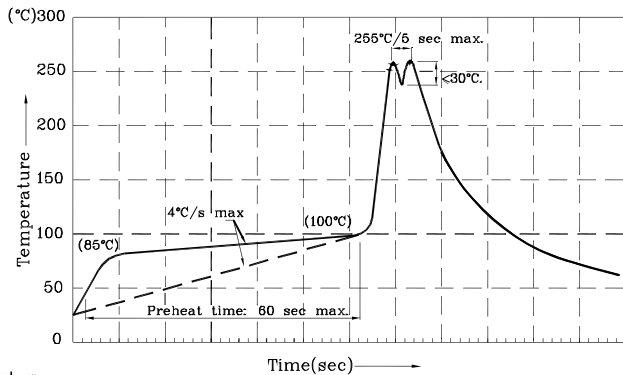
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



❖ CBD



Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



Notes:

1. Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 280°C
2. Peak wave soldering temperature between 245°C ~ 255°C for 3 sec (5 sec max).
3. Do not apply stress to the epoxy resin while the temperature is above 85°C.
4. Fixtures should not incur stress on the component when mounting and during soldering process.
5. SAC 305 solder alloy is recommended.
6. No more than one wave soldering pass.

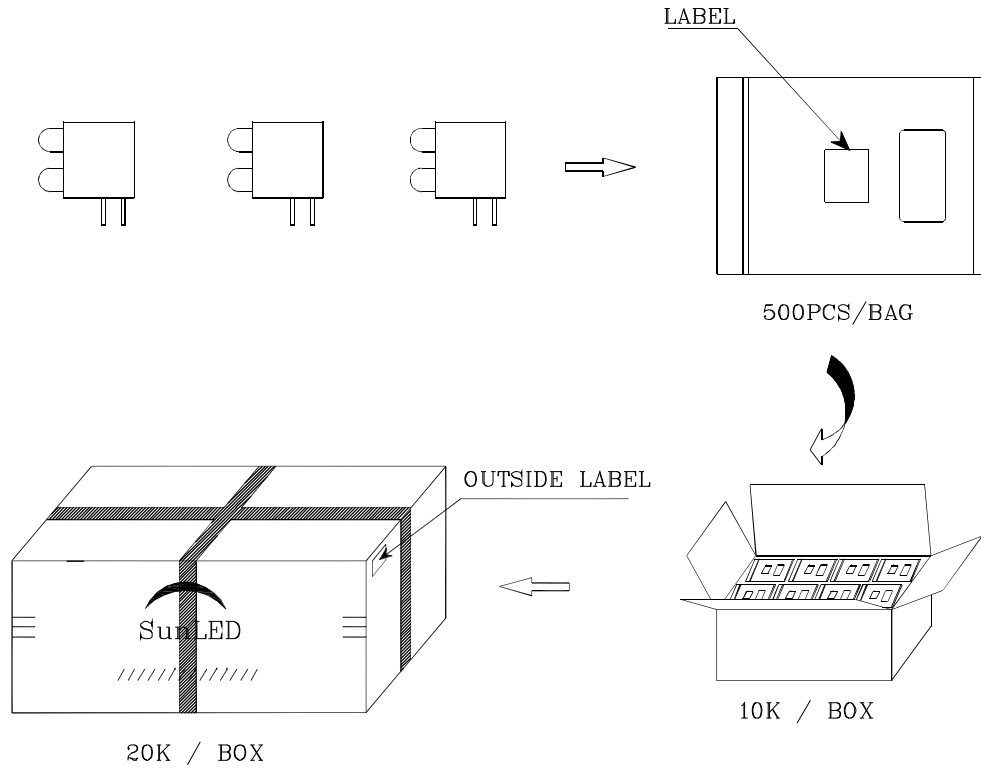
Remarks:


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.

**PACKING & LABEL SPECIFICATIONS**






Q.C. Q C

XX XX XXXX

PASSED

P/NO : XVG2Lxxx147x	
QTY : 500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	