

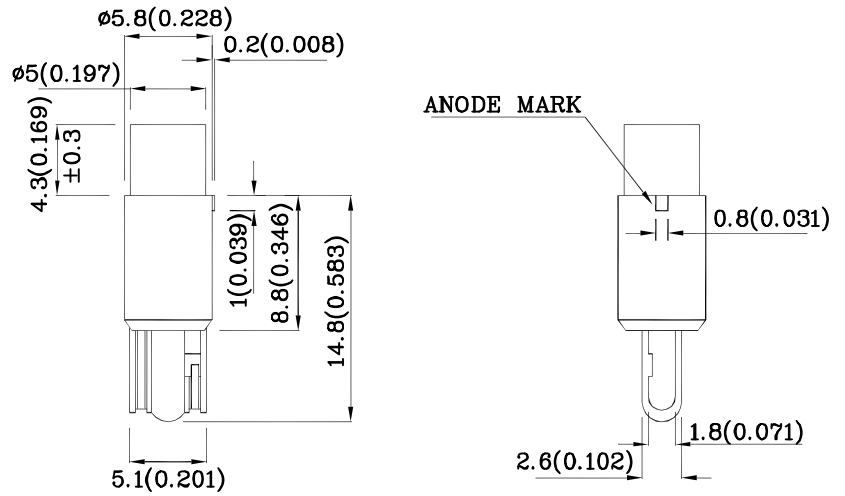
**Features**

- Housing material: Type 66 Nylon
- Housing UL rating: 94V-0
- Reliable & robust
- 14V internal resistor
- RoHS Compliant



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

**Package Schematics**



Notes:

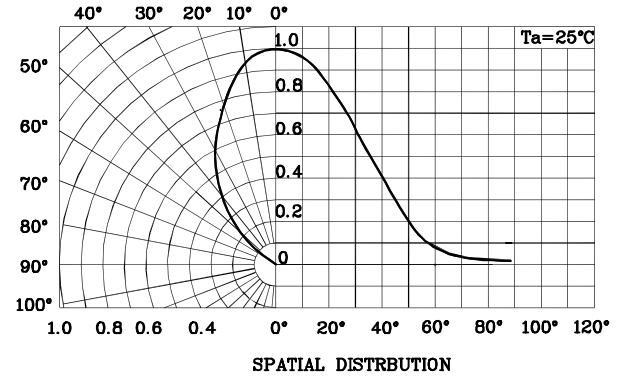
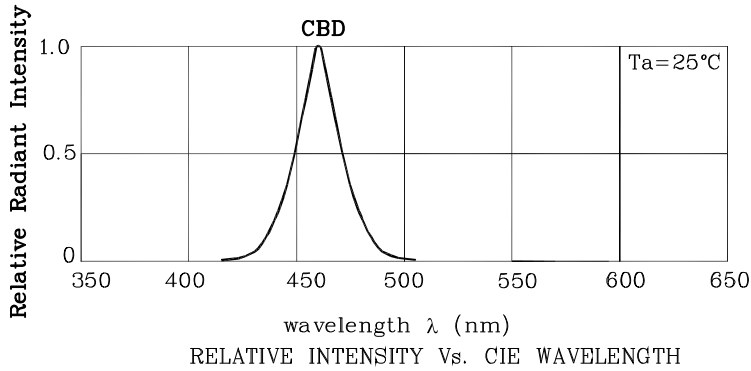
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25 (0.01)$  unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ )		CBD (InGaN)	Unit
Reverse Voltage	$V_R$	5	V
Forward Voltage	$V_F$	16	V
Power Dissipation	$P_D$	160	mW
Operating Temperature	$T_A$	-40 ~ +70	°C
Storage Temperature	$T_{stg}$	-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		

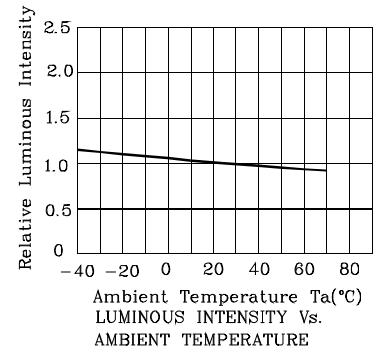
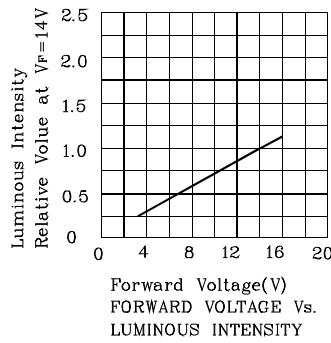
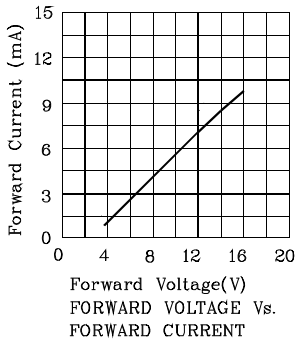
Operating Characteristics ( $T_A=25^\circ\text{C}$ )		CBD (InGaN)	Unit
Forward Current (Typ.) ( $V_F=14\text{V}$ )	$I_F$	8.5	mA
Forward Current (Max.) ( $V_F=14\text{V}$ )	$I_F$	12	mA
Reverse Current (Max.) ( $V_R=5\text{V}$ )	$I_R$	50	$\mu\text{A}$
Wavelength of Peak Emission CIE127-2007*(Typ.) ( $V_F=14\text{V}$ )	$\lambda_P$	468 460*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) ( $V_F=14\text{V}$ )	$\lambda_D$	470 465*	nm
Spectral Line Full Width At Half-Maximum (Typ.) ( $V_F=14\text{V}$ )	$\Delta\lambda$	25	nm

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* ( $V_F=14\text{V}$ ) mcd		Wavelength CIE127-2007* $\lambda_P$ nm	Viewing Angle 20 1/2
				min.	typ.		
XNZSCBD52W14V02	Blue	InGaN	Water Clear	20*	60*	468 460*	70°

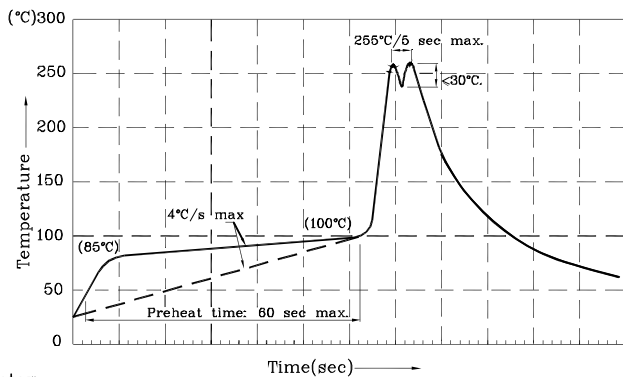
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



❖ 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:

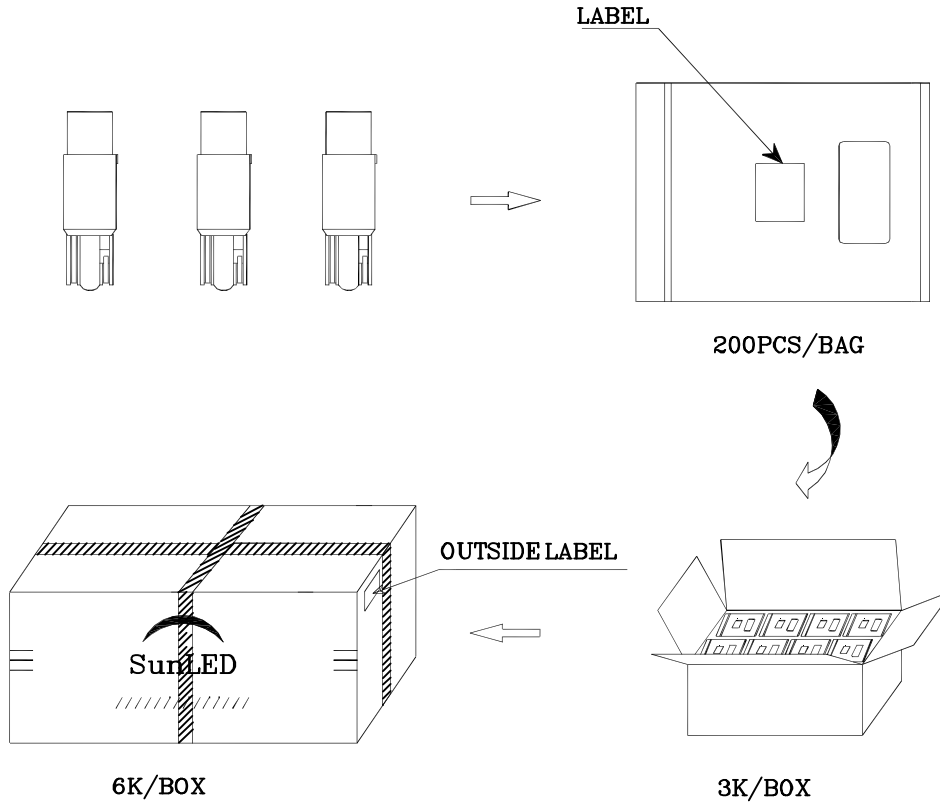

If special sorting is required (e.g. binning based on Luminous intensity/ luminous flux, or wavelength),

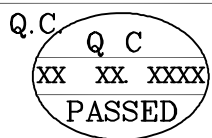
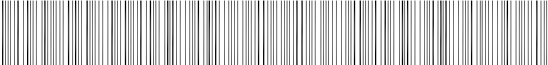
the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous intensity/ luminous flux: +/-15%

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**


P/NO : XNZSxxx52xx02
QTY : 200 pcs      CODE: XXX
S/N : XX
LOT NO:  XXXXXXXXXXXXXXXXXXXXXXXX
RoHS Compliant