

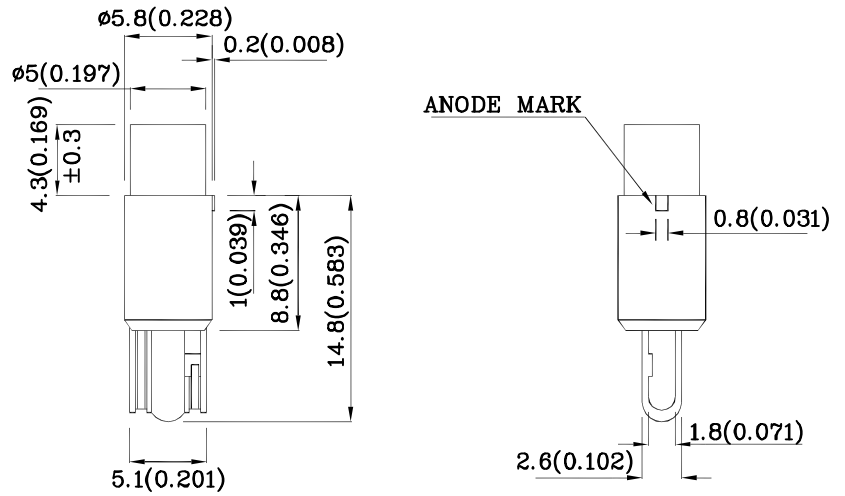
Features

- 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



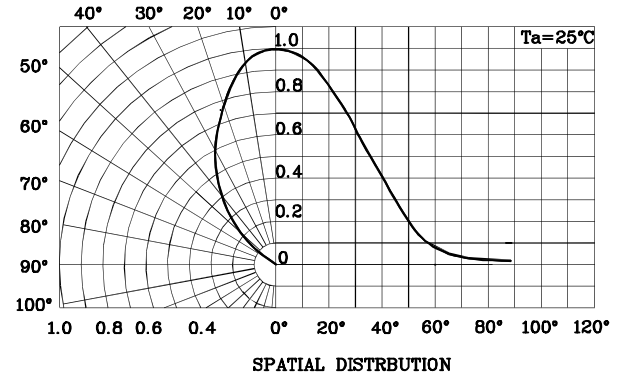
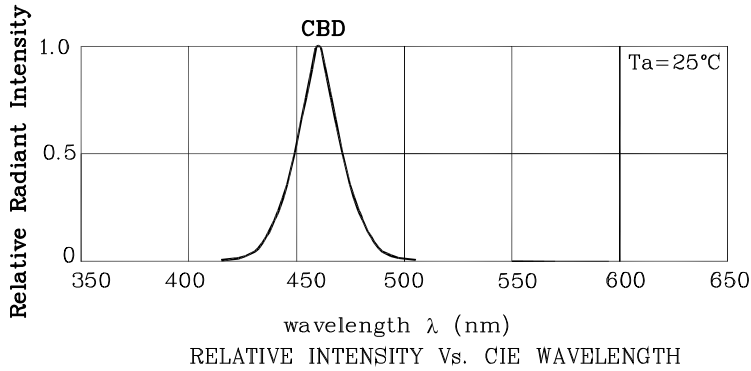
- Notes:
1. All dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
 3. Specifications are subject to change without notice.

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		

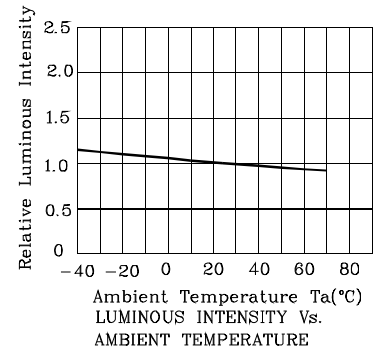
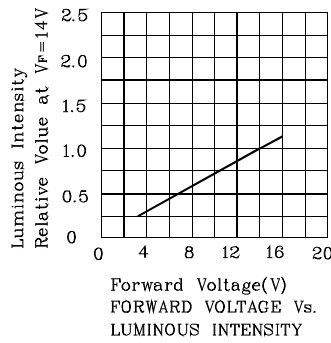
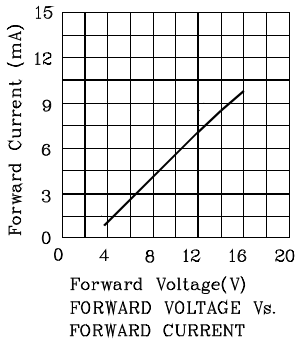
Operating Characteristics ($T_A=25^\circ\text{C}$)		CBD (InGaN)	Unit
Forward Current (Typ.) ($V_F=14\text{V}$)	I_F	8.5	mA
Forward Current (Max.) ($V_F=14\text{V}$)	I_F	12	mA
Reverse Current (Max.) ($V_R=5\text{V}$)	I_R	50	μA
Wavelength of Peak Emission CIE127-2007*(Typ.) ($V_F=14\text{V}$)	λ_P	468 460*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) ($V_F=14\text{V}$)	λ_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* λ_P nm	Viewing Angle 20 1/2
				min.	typ.		
XNZSCBD52W14V02	Blue	InGaN	Water Clear	20*	60*	468 460*	70°

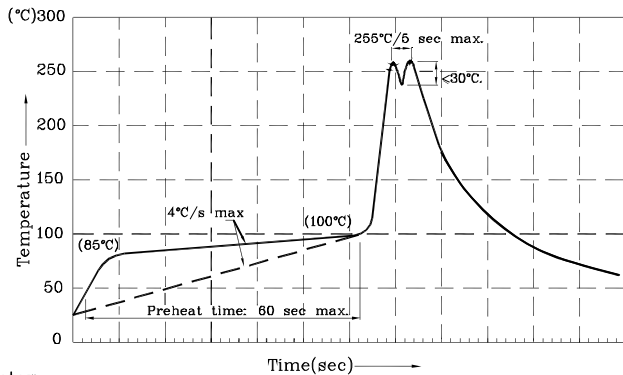
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



❖ 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.

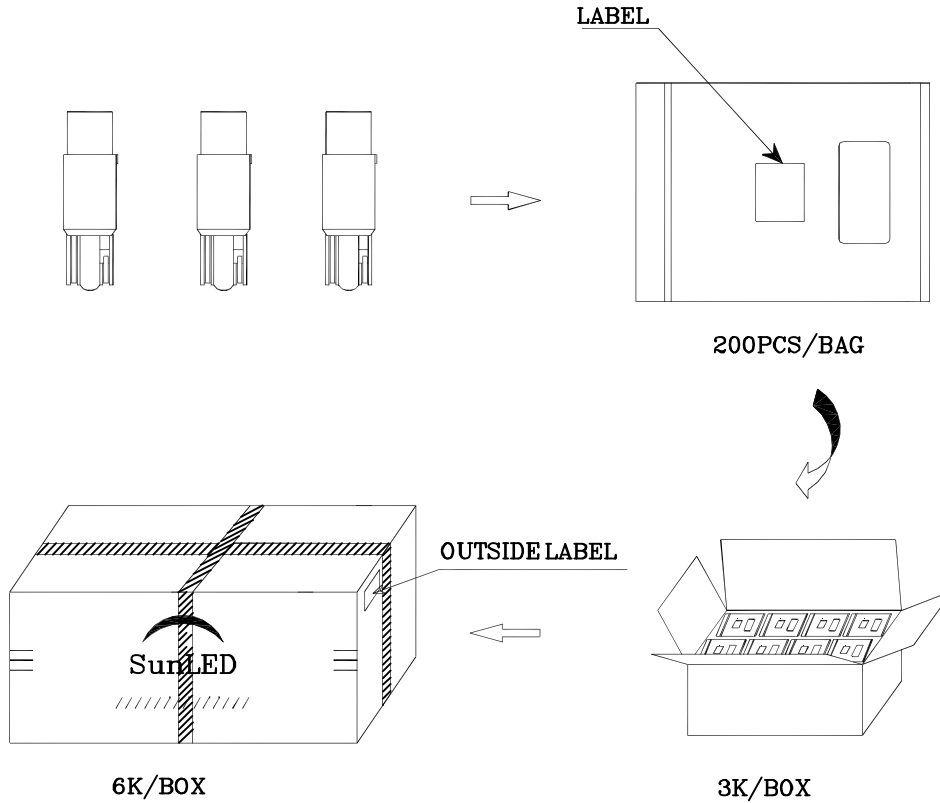

Remarks:

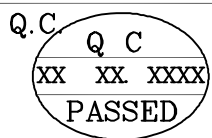
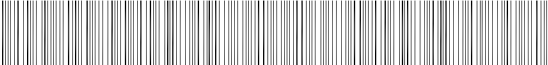
If special sorting is required (e.g. binning based on Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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