

Features

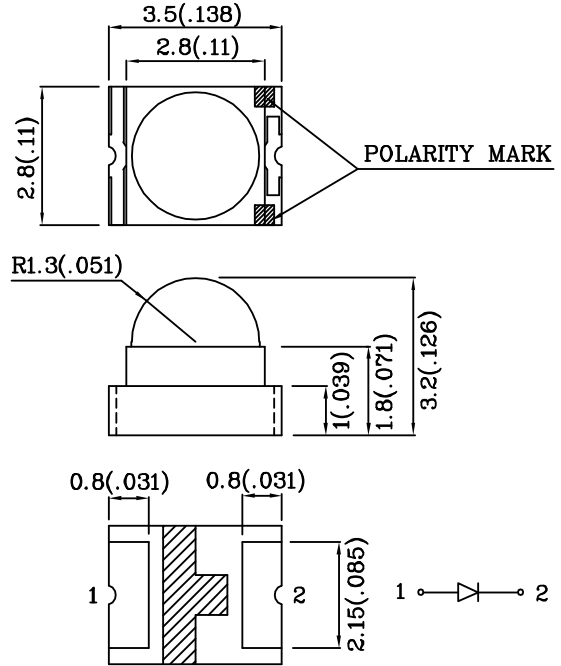
- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- IDEAL FOR BACKLIGHTING.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE : 500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Notes:

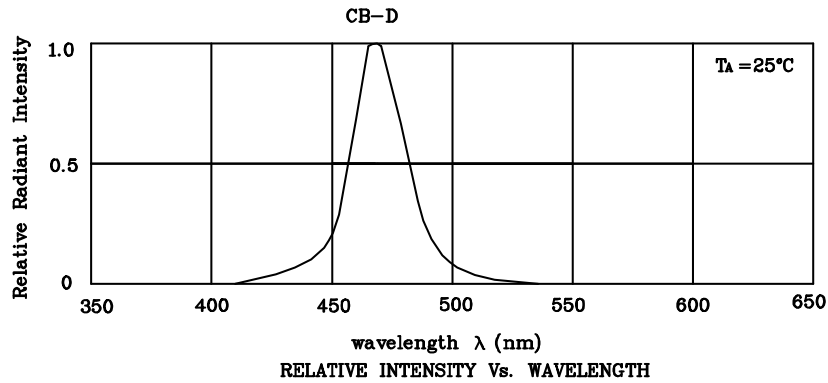
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ unless otherwise noted.



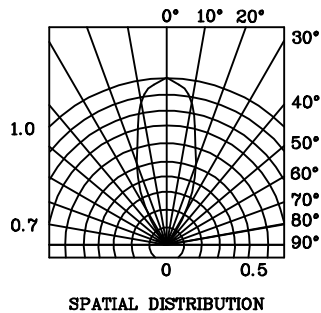
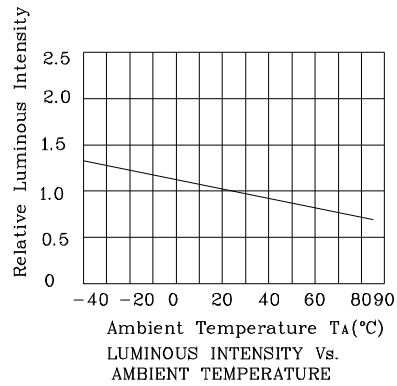
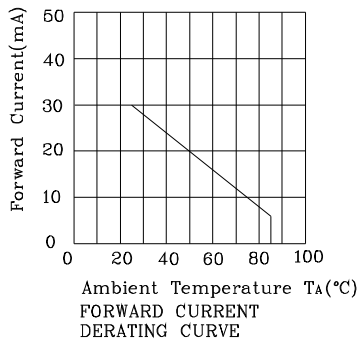
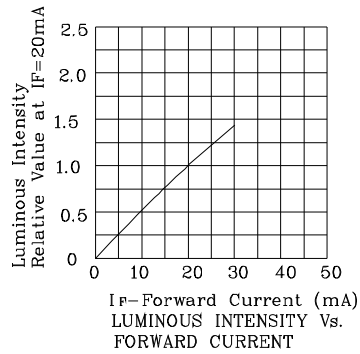
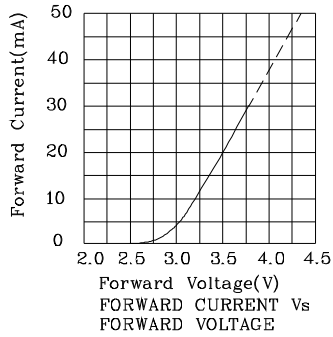
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)		CB-D (GaN)	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	180	mA
Power Dissipation	P_T	105	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +85	

Operating Characteristics ($T_A=25^\circ\text{C}$)		CB-D (GaN)	Unit
Forward Voltage (Typ.) ($I_F=20\text{mA}$)	V_F	3.5	V
Forward Voltage (Max.) ($I_F=20\text{mA}$)	V_F	4.0	V
Reverse Current ($V_R=5\text{V}$)	I_R	10	μA
Wavelength of Peak Emission ($I_F=20\text{mA}$)	λ_P	468	nm
Wavelength of Dominant Emission ($I_F=20\text{mA}$)	λ_D	470	nm
Spectral Line Full Width At Half-Maximum ($I_F=20\text{mA}$)	$\Delta\lambda$	25	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	100	pF

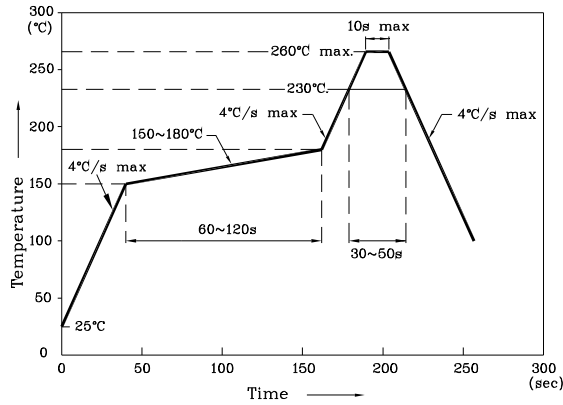
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($I_F=20\text{mA}$) mcd		Wavelength nm λ_P	Viewing Angle 2θ 1/2
				min.	typ.		
XZCBD45W-2	Blue	GaN	Water Clear	280	497	468	40°



❖ **CB-D**



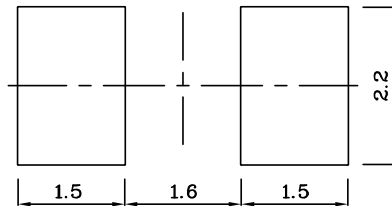
Reflow Soldering Profile For Lead-free SMT Process.



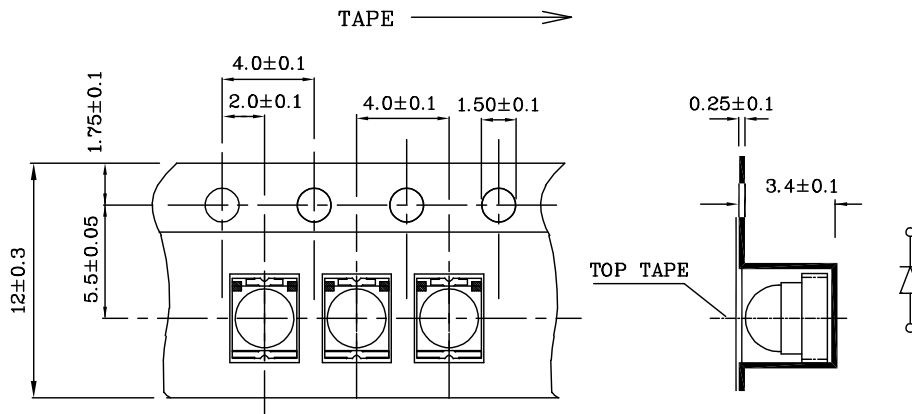
Notes:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

❖ Recommended Soldering Pattern (Units : mm;Tolerance:± 0.1)



❖ Tape Specification (Units : mm)



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.