

Features

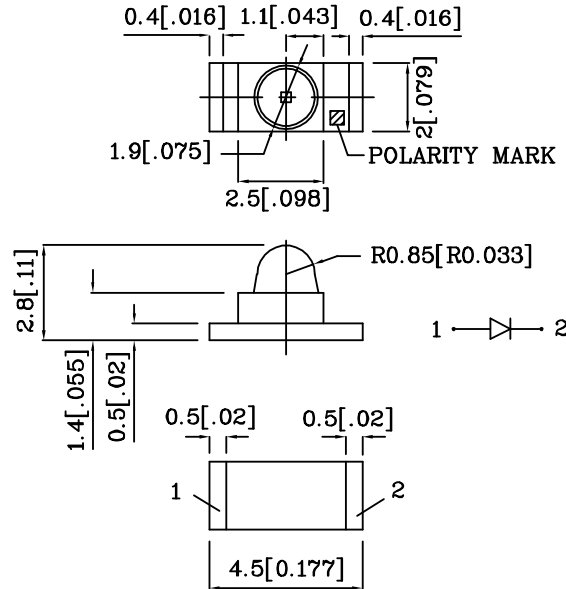
- 4.5x2mm SMT LED, 0.5mm THICKNESS
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 1000PCS/REEL.
- RoHS COMPLIANT.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Notes:

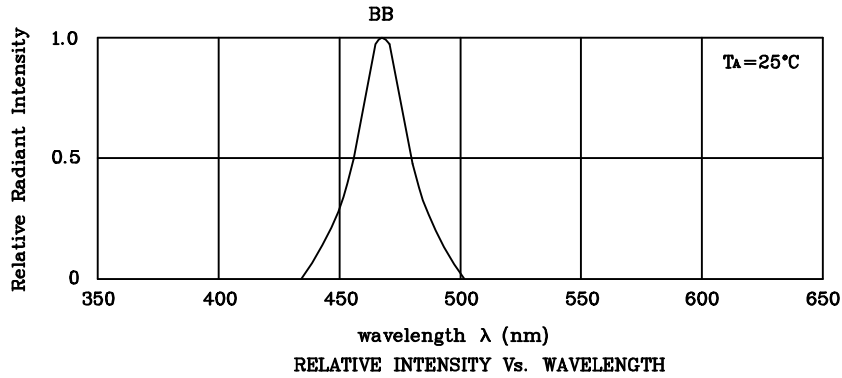
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ unless otherwise noted.



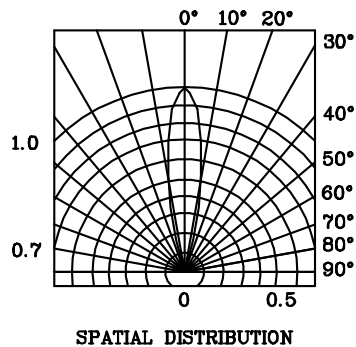
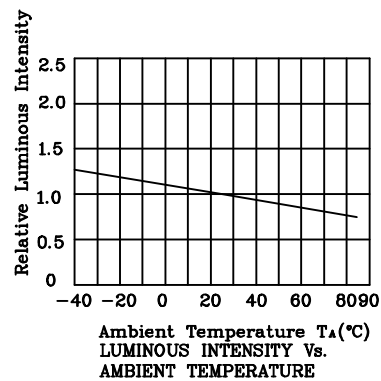
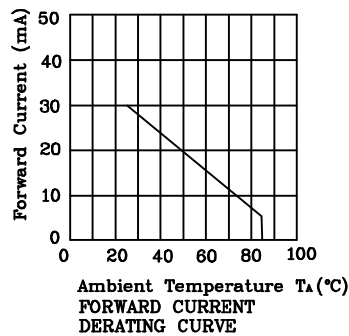
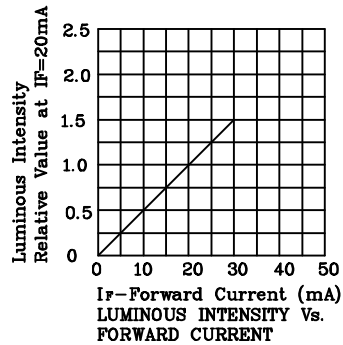
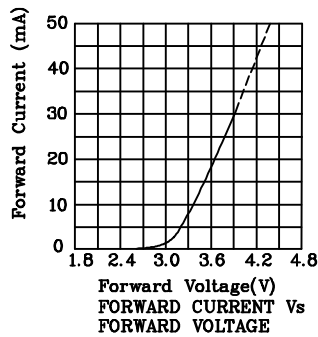
Absolute maximum ratings ($T_A=25^\circ\text{C}$)		BB (InGaN)	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	160	mA
Power Dissipation	P_T	102	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)		1000	V

Operating Characteristics ($T_A=25^\circ\text{C}$)		BB (InGaN)	Unit
Forward Voltage (Typ.) ($I_F=20\text{mA}$)	V_F	3.65	V
Forward Voltage (Max.) ($I_F=20\text{mA}$)	V_F	4.2	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	65	pF

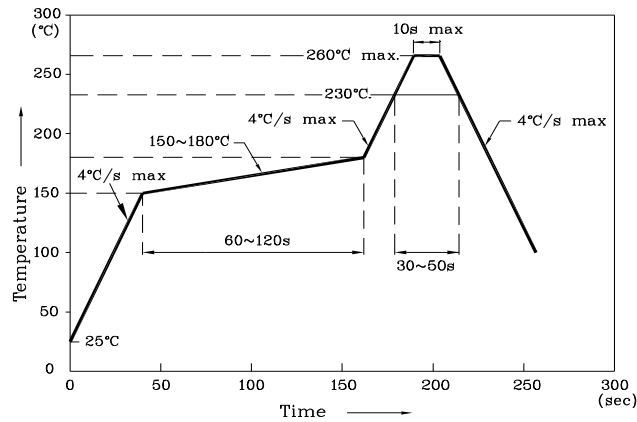
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($I_F=20\text{mA}$) mcd		Wavelength nm λ_P	Viewing Angle 2θ 1/2
				min.	typ.		
XZBB77W	Blue	InGaN	Water Clear	70	198	468	20°



❖ BB



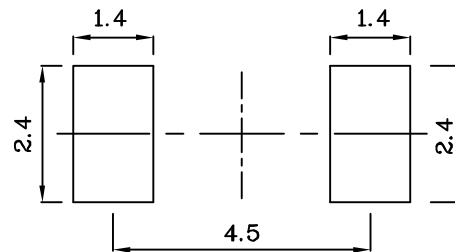
Reflow Soldering Profile For Lead-free SMT Process.



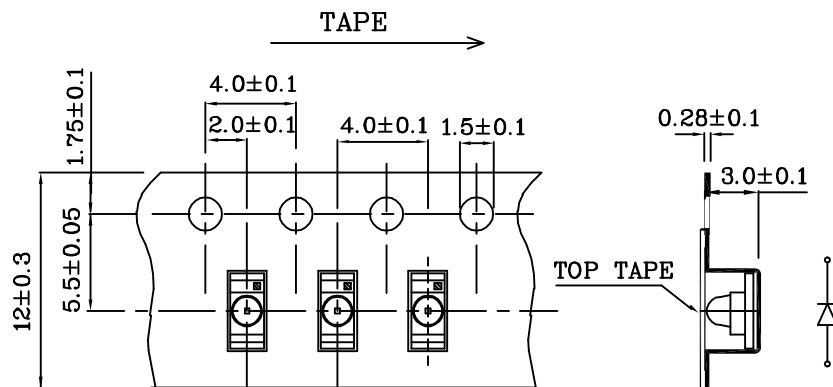
Notes:

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, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.