

Features

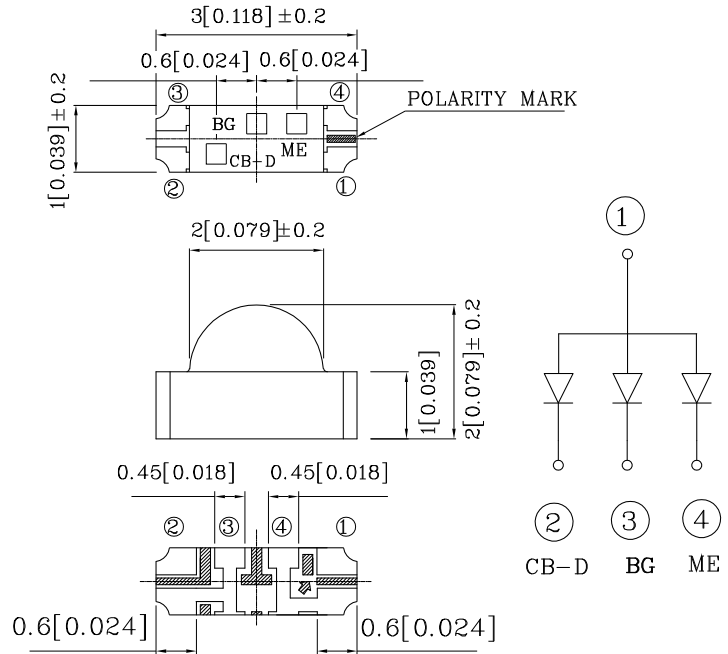
- LOW POWER CONSUMPTION.
- 3.0mmx1.0mm RIGHT ANGLE SMT LED, 2.0mm THICKNESS.
- CAN PRODUCE ANY COLOR IN VISIBLE SPECTRUM, INCLUDING WHITE LIGHT.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Notes:

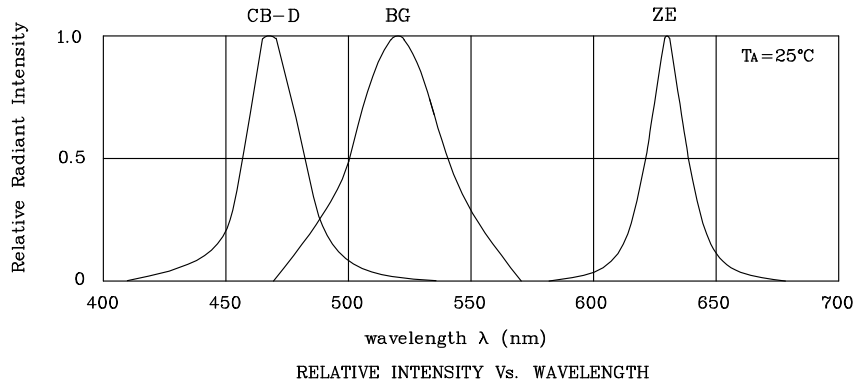
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ " unless otherwise noted.



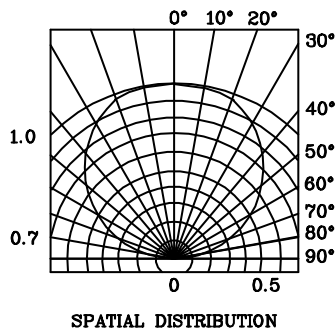
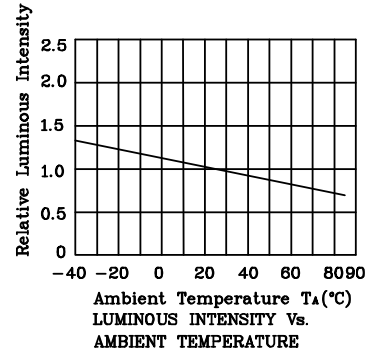
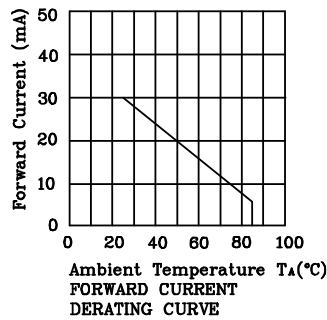
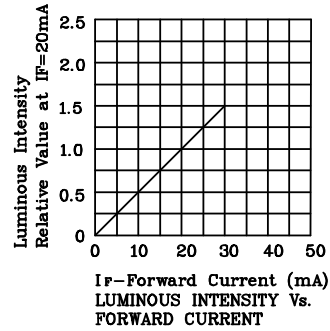
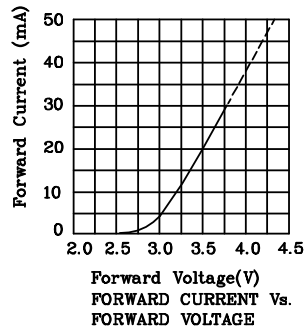
Absolute maximum ratings ($T_A=25^\circ\text{C}$)		CB-D (GaN)	BG (InGa N)	ME (InGa AlP)	Unit
Reverse Voltage	V_R	5	5	5	V
Forward Current	I_F	30	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	150	150	195	mA
Power Dissipation	P_T	105	105	150	mW
Operating Temperature	T_A	-40 ~ +85			°C
Storage Temperature	T_{stg}	-40 ~ +85			

Operating Characteristics ($T_A=25^\circ\text{C}$)		CB-D (GaN)	BG (InGa N)	ME (InGa AlP)	Unit
Forward Voltage (Typ.) ($I_F=20\text{mA}$)	V_F	3.5	3.5	2.0	V
Forward Voltage (Max.) ($I_F=20\text{mA}$)	V_F	4.0	4.5	2.5	V
Reverse Current ($V_R=5\text{V}$)	I_R	10	10	10	μA
Wavelength of Peak Emission ($I_F=20\text{mA}$)	λ_P	468	520	630	nm
Wavelength of Dominant Emission ($I_F=20\text{mA}$)	λ_D	470	525	621	nm
Spectral Line Full Width At Half- Maximum ($I_F=20\text{mA}$)	$\Delta\lambda$	25	38	20	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	100	45	25	pF

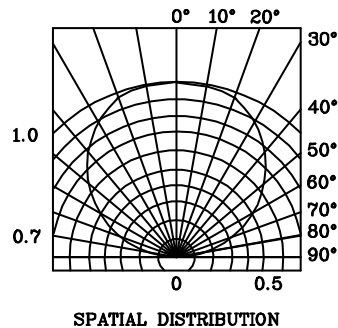
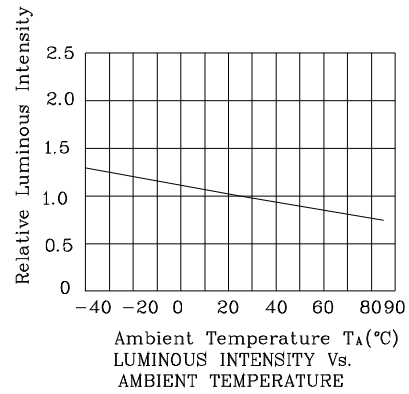
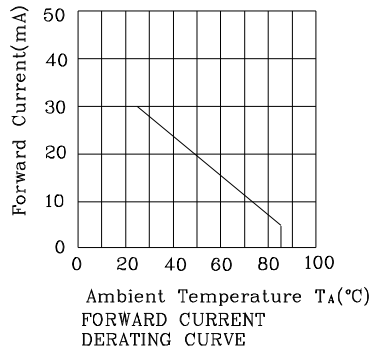
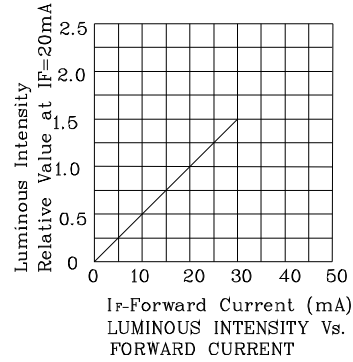
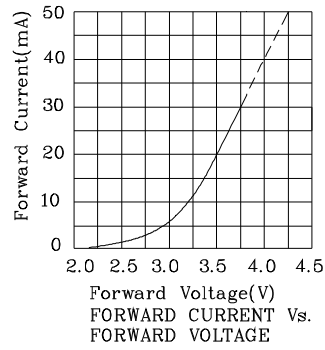
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($I_F=20\text{mA}$) mcd		Wavelength nm λ_P	Viewing Angle 2θ 1/2
				min.	typ.		
XZCBDBGME56W-3	Blue	GaN	Water Clear	50	98	468	120°
	Green	InGaN		70	248	520	
	Red	InGaAlP		110	297	630	



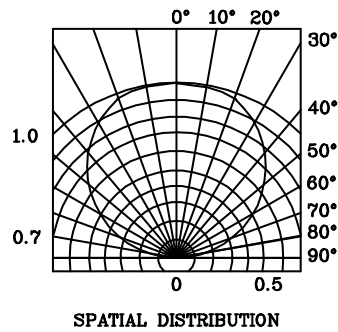
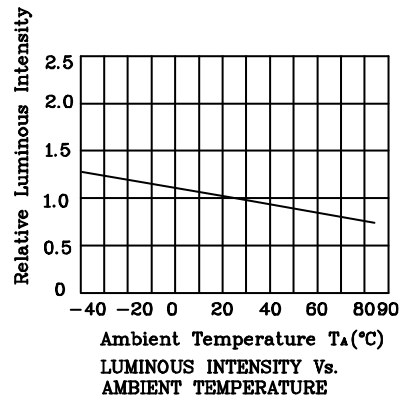
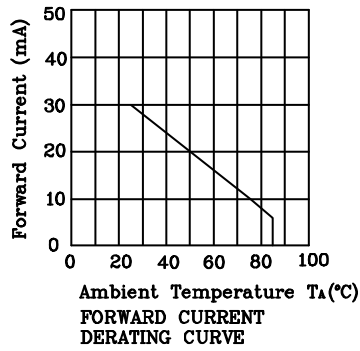
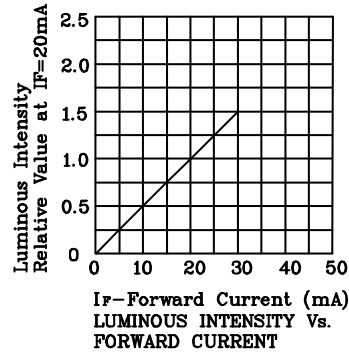
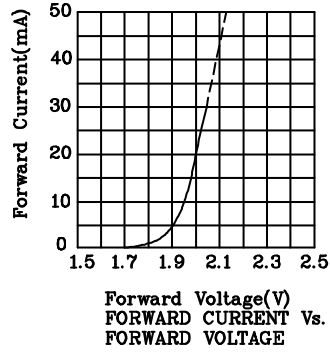
❖ CB-D



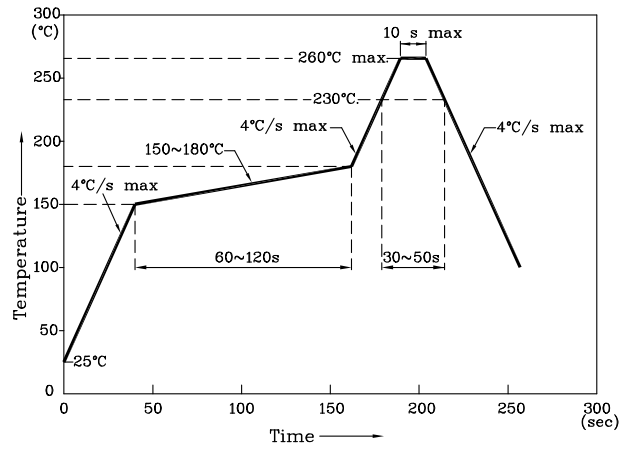
❖ BG



❖ ME



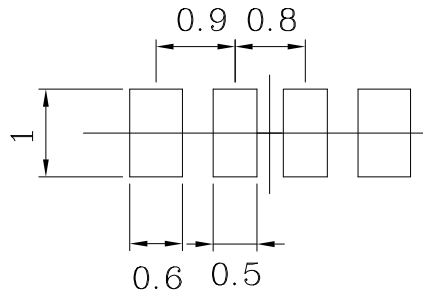
Reflow Soldering Profile For Lead-free SMT Process.



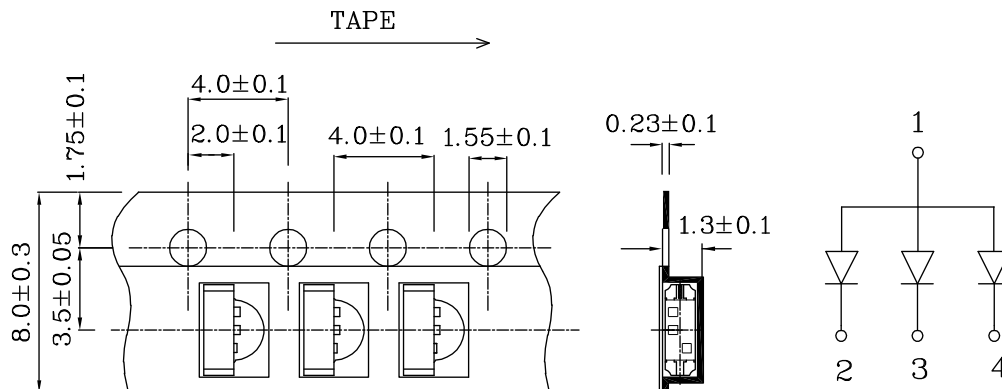
NOTES:

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.