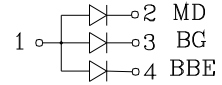
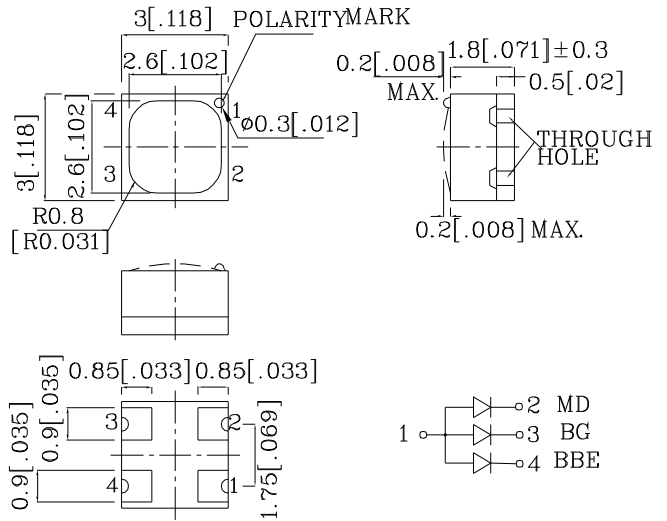


Features

- LOW POWER CONSUMPTION.
- 3.0mmx3.0mm SMT LED, 2.0mm(MAX.) THICKNESS.
- ONE RED, ONE GREEN AND ONE BLUE CHIPS IN ONE PACKAGE.
- CAN PRODUCE ANY COLOR IN VISIBLE SPECTRUM, INCLUDING WHITE LIGHT.
- PACKAGE : 1000PCS / REEL.
- ELECTROSTATIC DISCHARGE THRESHOLD (HBM) : 0-1999V.
- RoHS COMPLIANT.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE



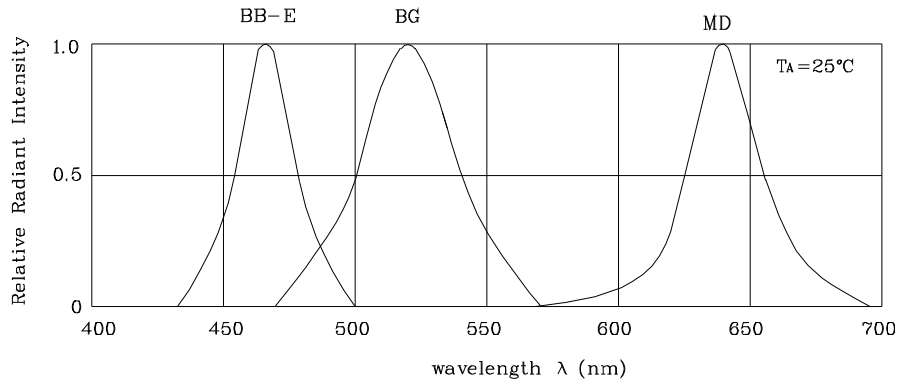
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.2(0.008") unless otherwise noted.

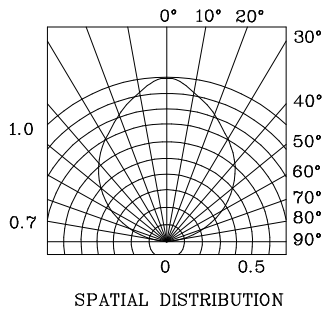
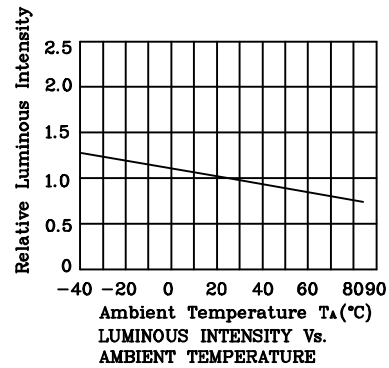
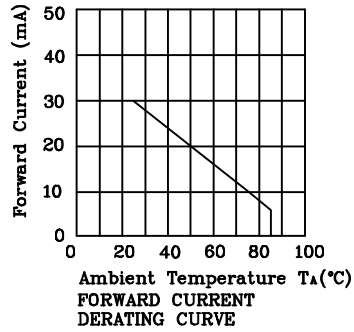
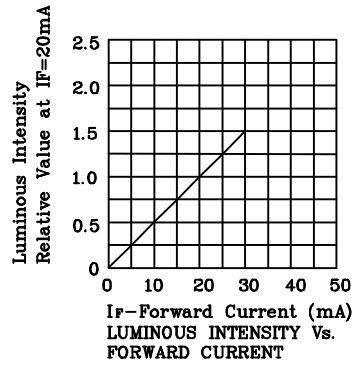
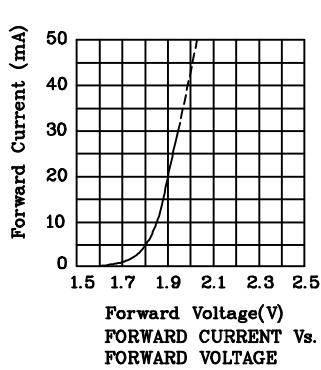
Absolute Maximum Ratings (TA=25°C)		MD (InGa AlP)	BG (InGa N)	BB-E (InGa N)	Unit
Reverse Voltage	VR	5	5	5	V
Forward Current	IF	30	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	185	150	160	mA
Power Dissipation	PT	170	105	120	mW
Operating Temperature	TA	-40 ~ +85			°C
Storage Temperature	Tstg	-40 ~ +85			

Operating Characteristics (TA=25°C)		MD (InGa AlP)	BG (InGa N)	BB-E (InGa N)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	1.9	3.5	3.7	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	4.5	4.3	V
Reverse Current (VR=5V)	IR	10	10	10	uA
Wavelength of Peak Emission (IF=20mA)	λ P	640	520	465	nm
Wavelength of Dominant Emission (IF=20mA)	λ D	628	525	470	nm
Spectral Line Full Width At Half-Maximum (IF=20mA)	Δλ	27	38	25	nm
Capacitance (VF=0V, f=1MHz)	C	45	45	110	pF

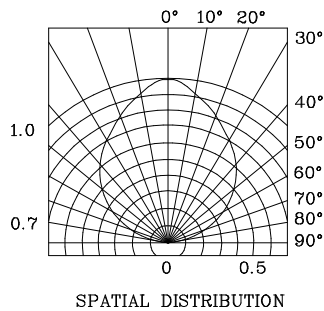
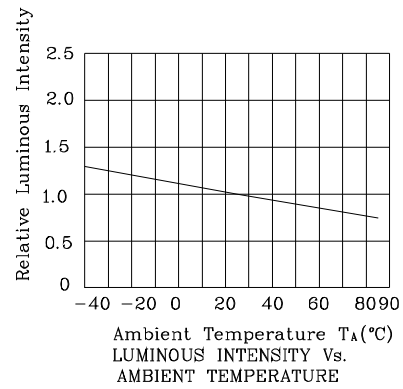
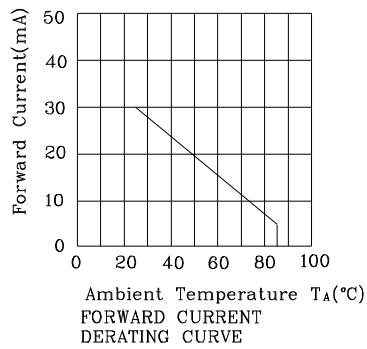
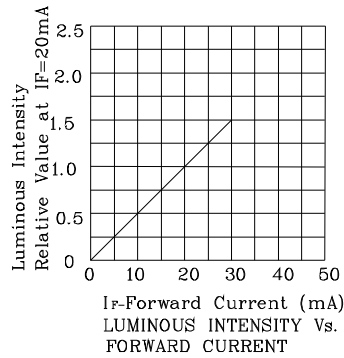
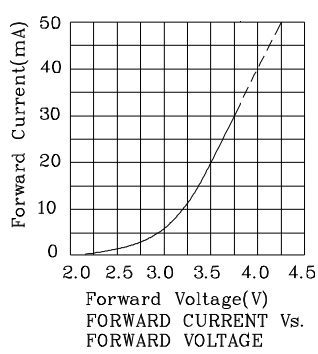
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2θ 1/2
				min.	typ.		
XZMDBGBBE86W	Red	InGaAlP	Water Clear	110	218	640	100°
	Green	InGaN		110	248	520	
	Blue	InGaN		50	118	465	



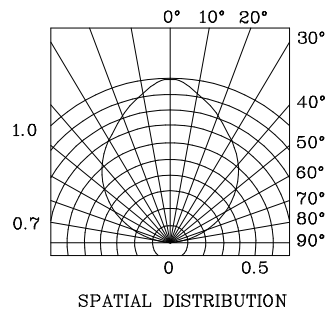
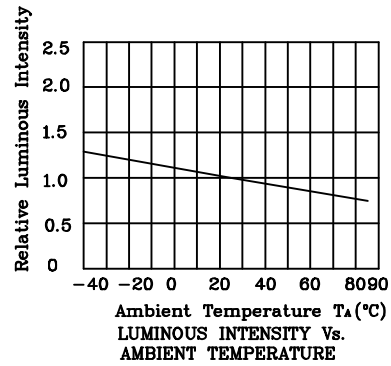
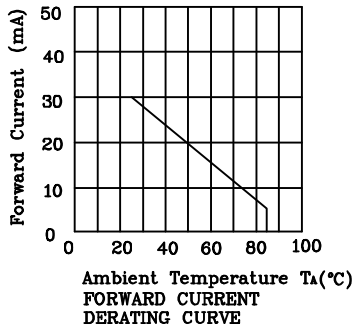
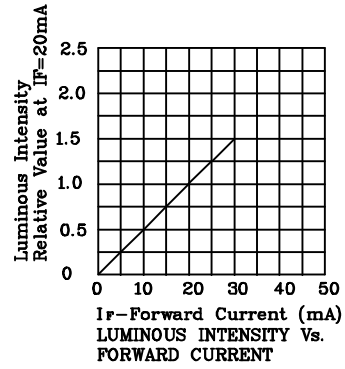
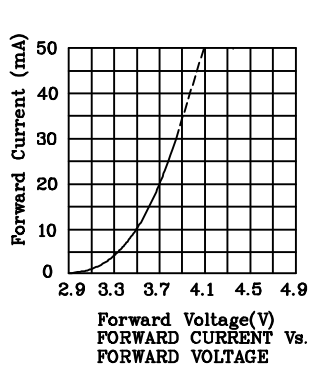
❖ MD



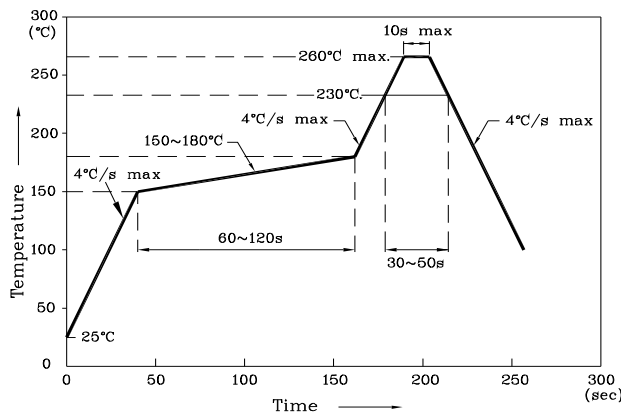
❖ BG



❖ BB-E



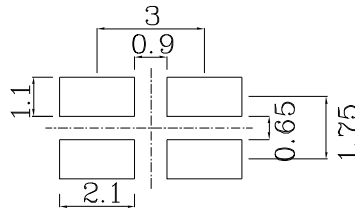
Reflow Soldering Profile For Lead-free SMT Process.



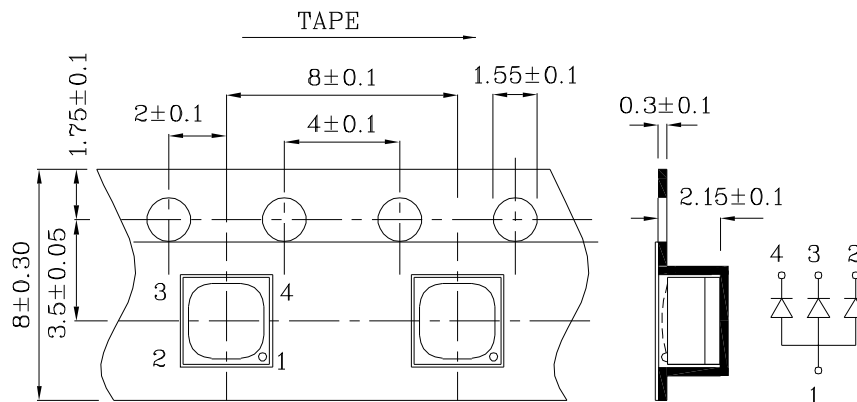
Notes:

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.