

Features

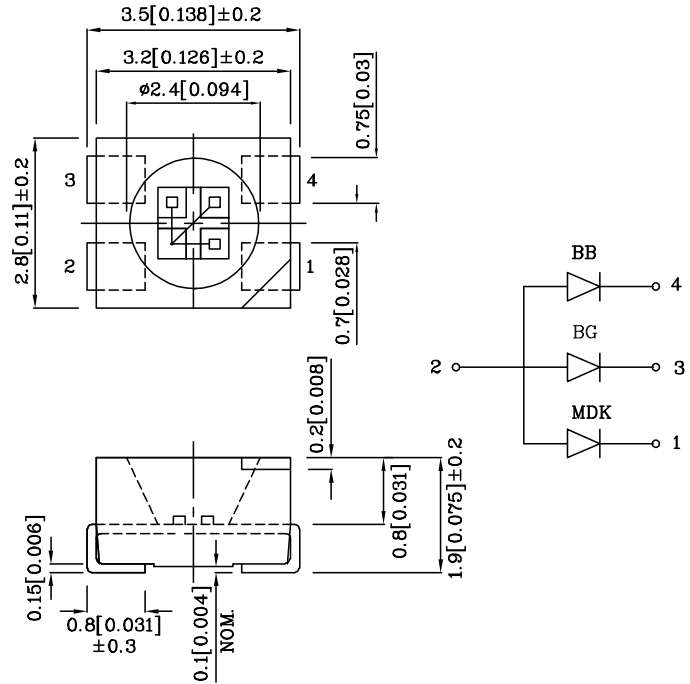
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE: 1500PCS / REEL.
- RoHS COMPLIANT.
- ELECTROSTATIC DISCHARGE CLASSIFICATION: CLASS 1/HBM(MIL-STD-883METHOD3015.7).



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Notes:

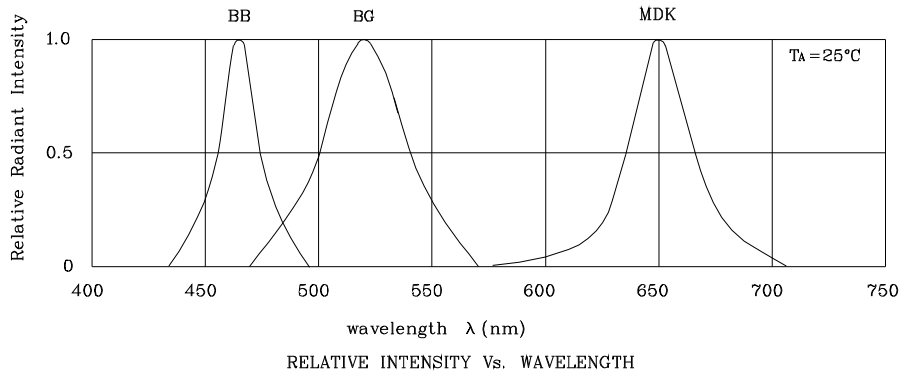
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ " unless otherwise noted.



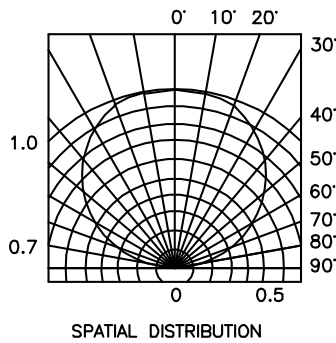
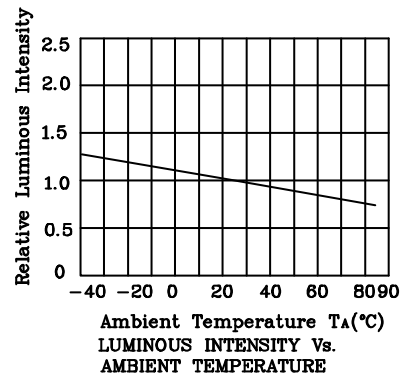
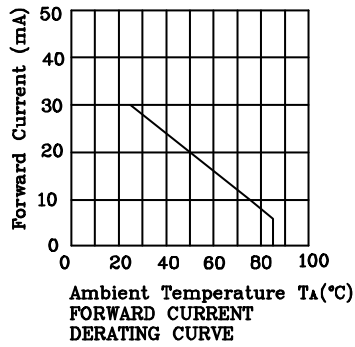
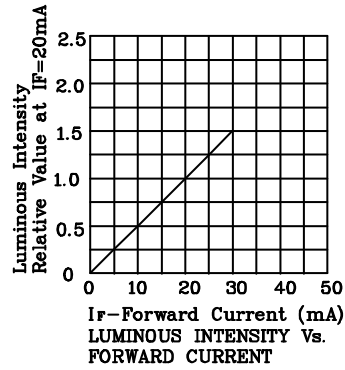
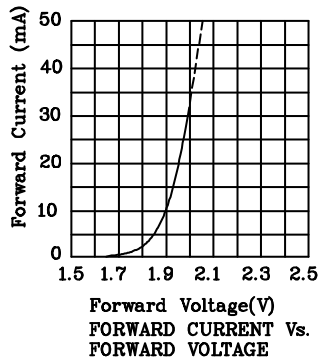
Absolute maximum ratings (T _A =25°C)		MDK (InGaA IP)	BG (InGa N)	BB (InG aN)	Unit
Reverse Voltage	V _R	5	5	5	V
Forward Current	I _F	30	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	185	150	160	mA
Power Dissipation	P _T	75	135	126	mW
Operating Temperature	T _A	-40 ~ +85			°C
Storage Temperature	T _{stg}	-40 ~ +85			

Operating Characteristics (T _A =25°C)		MDK (InGaA IP)	BG (InGa N)	BB (InGa N)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	1.95	3.5	3.65	V
Forward Voltage (Max.) (I _F =20mA)	V _F	2.5	4.5	4.2	V
Reverse Current (V _R =5V)	I _R	10	10	10	uA
Wavelength of Peak Emission (I _F =20mA)	λ _p	650	520	468	nm
Wavelength of Dominant Emission (I _F =20mA)	λ _D	635	525	470	nm
Spectral Line Full Width At Half-Maximum (I _F =20mA)	Δλ	28	38	25	nm
Capacitance (V _F =0V, f=1MHz)	C	35	45	65	pF

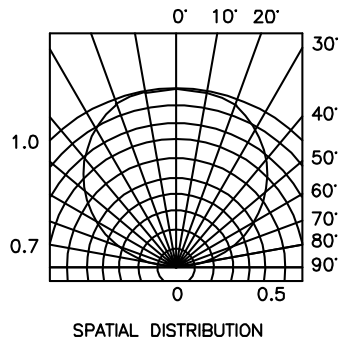
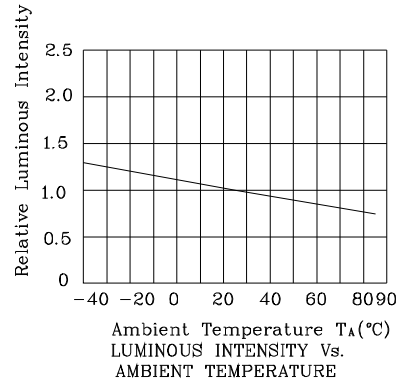
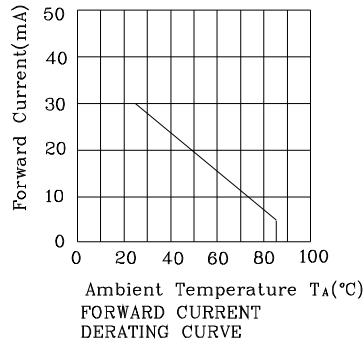
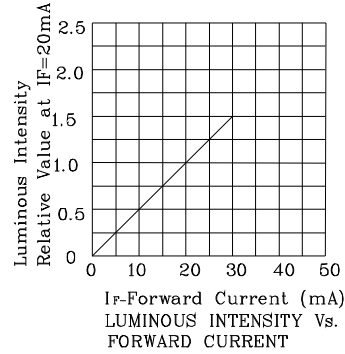
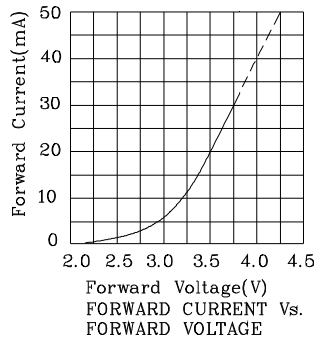
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I _F =20mA) mcd		Wavelength nm λ _P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZMDKKBGBB45W	Red	InGaAlP	Water Clear	70	198	650	120°
	Green	InGaN		70	198	520	
	Blue	InGaN		36	69	468	



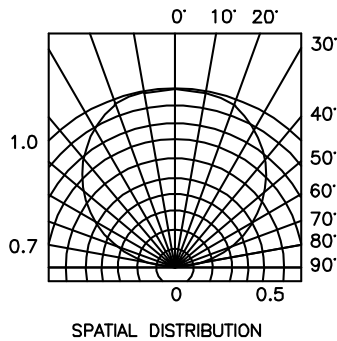
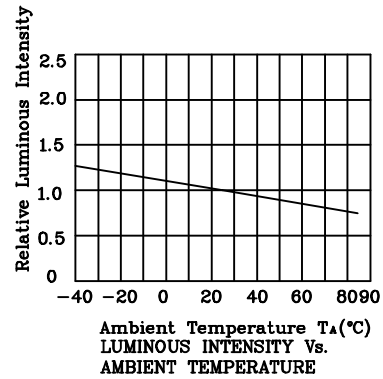
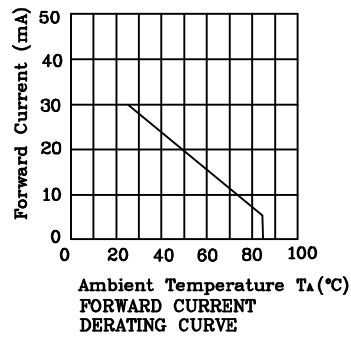
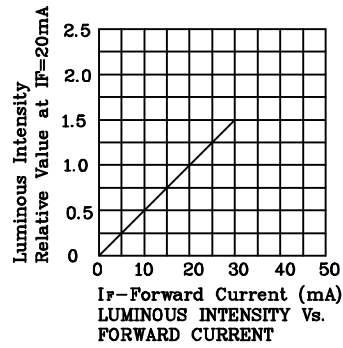
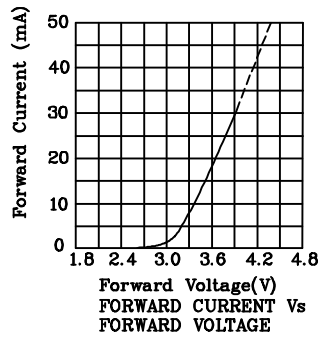
❖ MDK



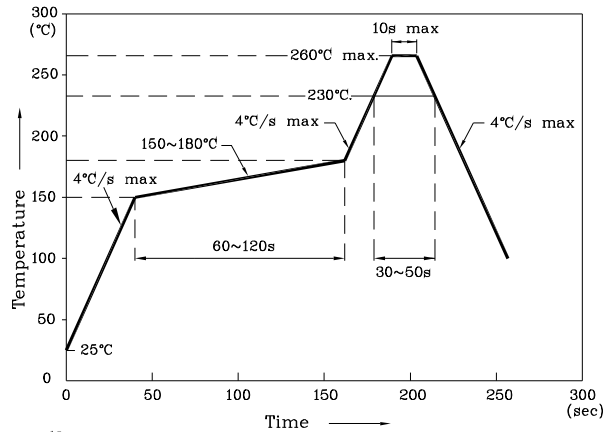
◆ BG



❖ BB



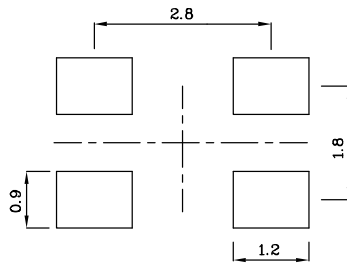
Reflow Soldering Profile For Lead-free SMT Process.



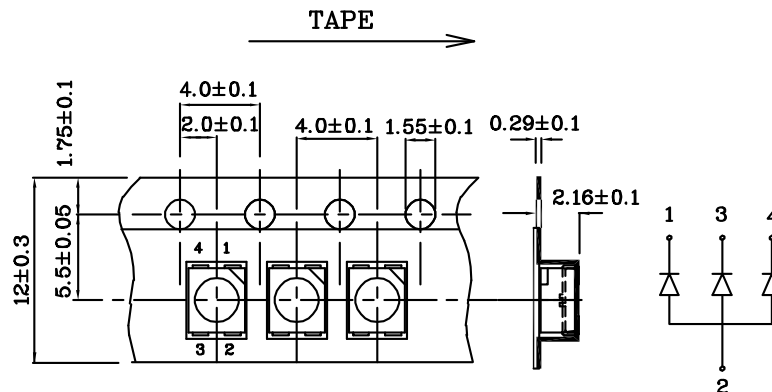
Notes:

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.