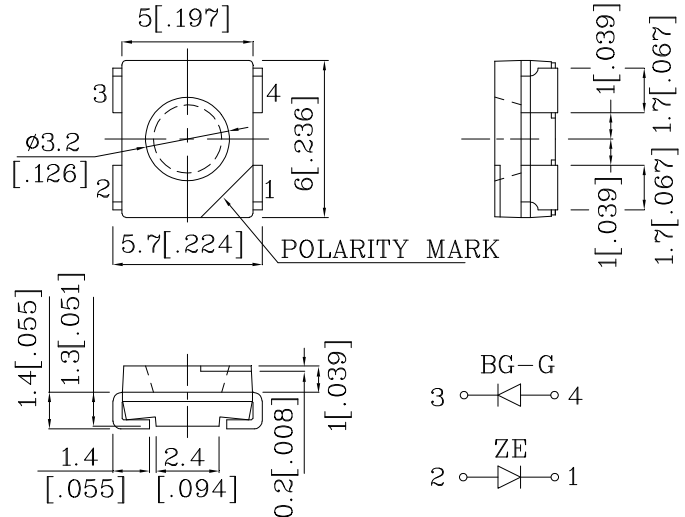


Features

- CHIPS CAN BE CONTROLLED SEPARATELY.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE: 500PCS / REEL.
- RoHS COMPLIANT.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



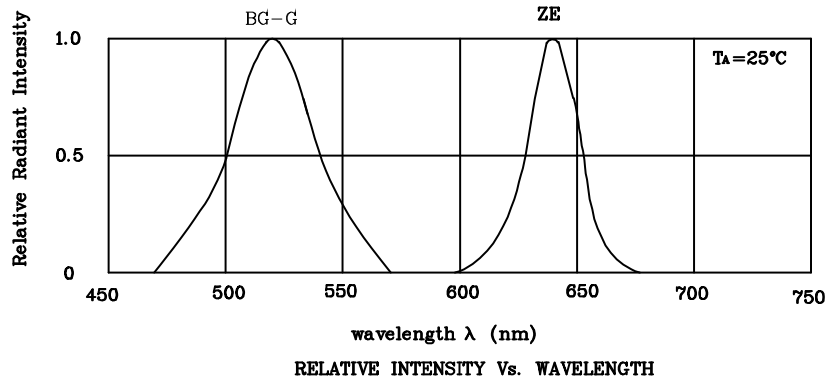
Notes:

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

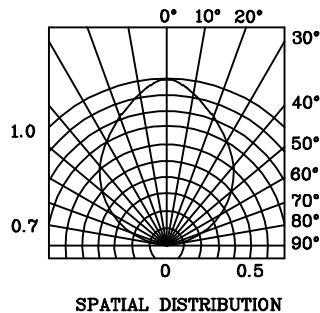
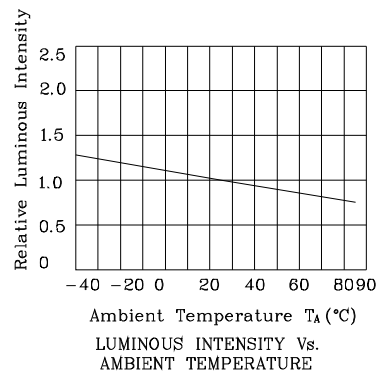
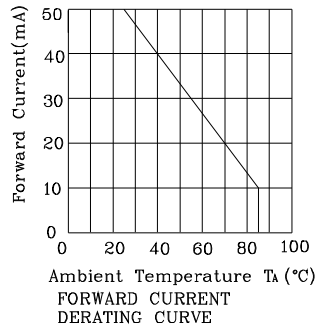
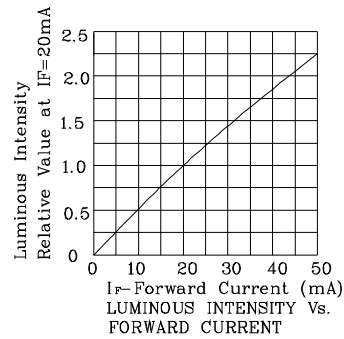
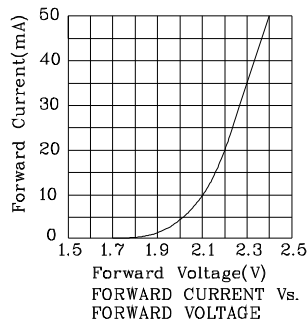
Absolute maximum ratings (TA=25°C)		ZE (InGaAlP)	BG-G (InGaN)	Unit
Reverse Voltage	VR	5	5	V
Forward Current	IF	50	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	150	150	mA
Power Dissipation	PT	140	135	mW
Operating Temperature	TA	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Threshold (HBM)		---	1000	V

Operating Characteristics (TA=25°C)		ZE (InGaAlP)	BG-G (InGaN)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	2.2	3.5	V
Forward Voltage (Max.) (IF=20mA)	VF	2.8	4.5	V
Reverse Current (VR=5V)	IR	10	10	uA
Wavelength of Peak Emission (IF=20mA)	λP	640	518	nm
Wavelength of Dominant Emission (IF=20mA)	λD	630	525	nm
Spectral Line Full Width At Half-Maximum (IF=20mA)	$\Delta\lambda$	25	36	nm
Capacitance (VF=0V, f=1MHz)	C	27	50	pF

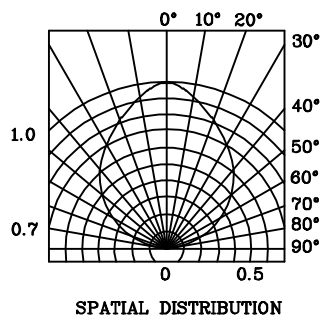
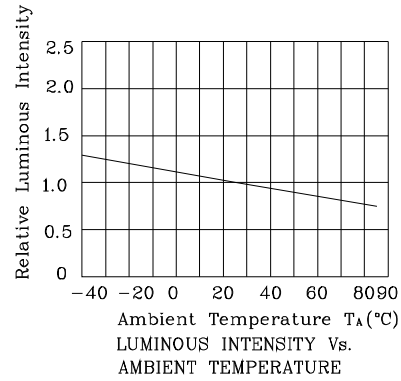
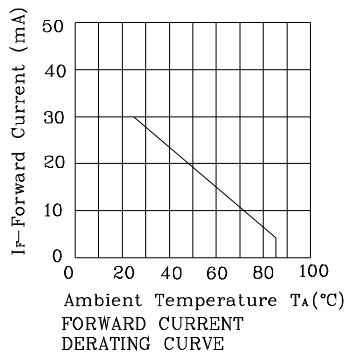
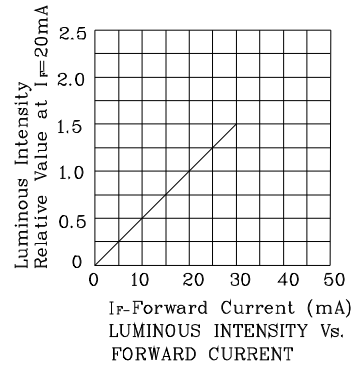
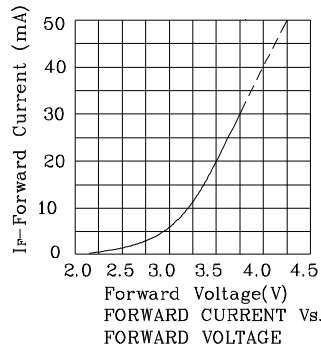
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=30mA*50mA) mcd		Wavelength nm λP	Viewing Angle 2 θ 1/2
				min.	typ.		
XZZEBGG82W	Red	InGaAlP	Water Clear	*1500	*2290	640	100°
	Green	InGaN		380	745	518	
Published Date : MAY 21,2005		Drawing No : XDSA7990		V1	Checked : B.L.LIU		P.1/4



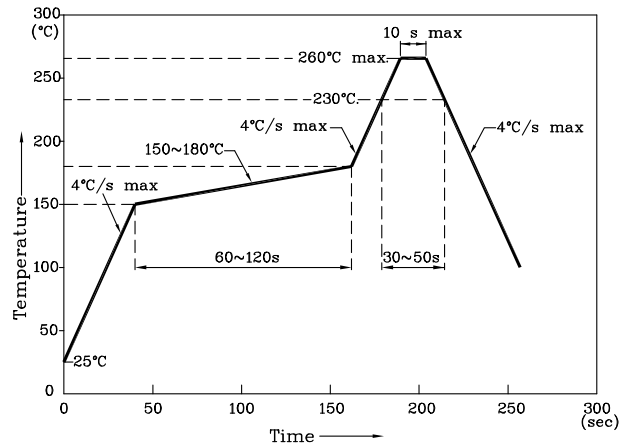
❖ ZE



❖ **BG-G**



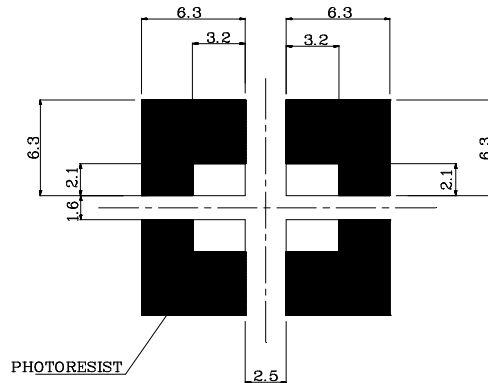
Reflow Soldering Profile For Lead-free SMT Process.



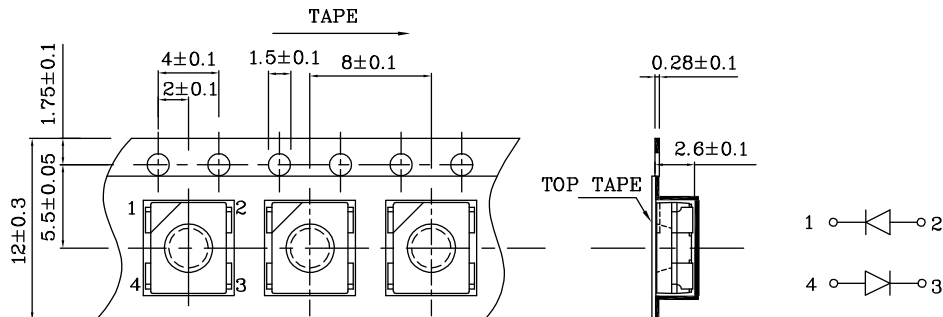
NOTES:

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.