

PRELIMINARY SPEC

Features:

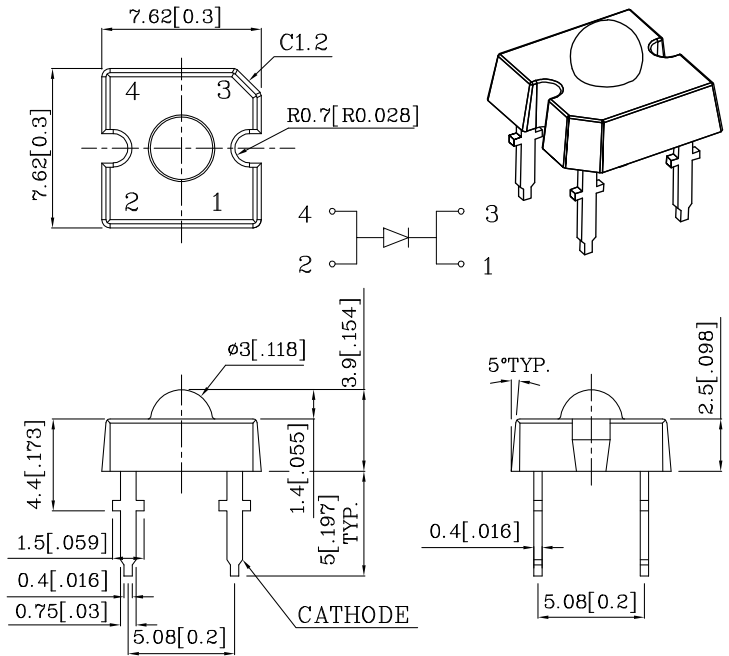
- HIGH LUMINANCE OUTPUT.
- DESIGN FOR HIGH CURRENT OPERATION.
- UNIFORM COLOR.
- LOW POWER CONSUMPTION.
- LOW THERMAL RESISTANCE.
- LOW PROFILE.
- PACKAGED IN TUBES FOR USE WITH AUTOMATIC INSERTION EQUIPMENT.
- RoHS COMPLIANT.

Benefits:

- *Outstanding Material Efficiency.
- *Electricity savings.
- *Maintenance savings.
- *Reliable and Rugged.

Typical Applications:

- *Automotive Exterior Lighting.
- *Electronic Signs and Signals.
- *Specialty Lighting.



Notes:

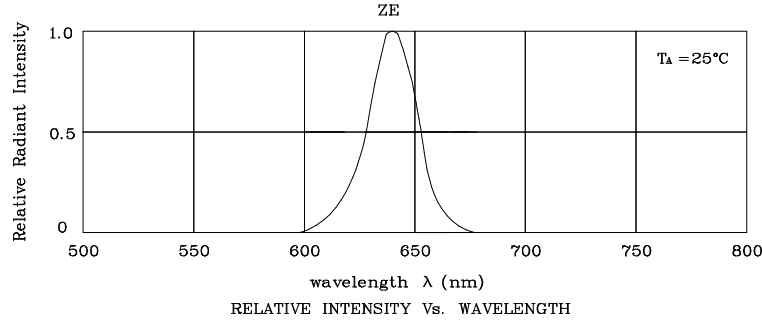
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)		ZE (InGaAlP)	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	70	mA
Power Dissipation	P_T	217	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	T_{stg}	-55 ~ +85	
Lead Solder Temperature [1.5mm(0.06inch)Below Seating Plane.]	260°C For 5 Seconds		

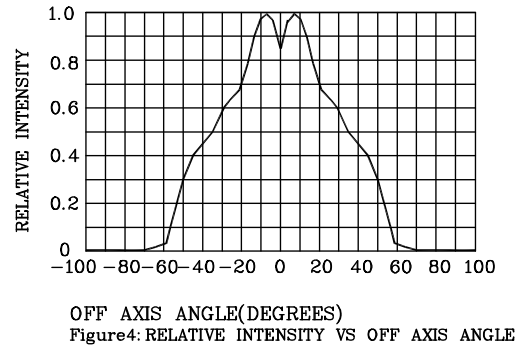
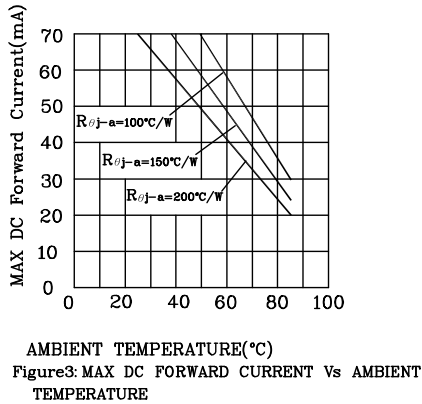
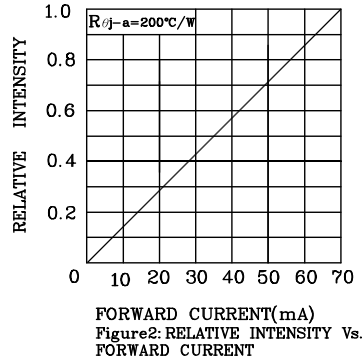
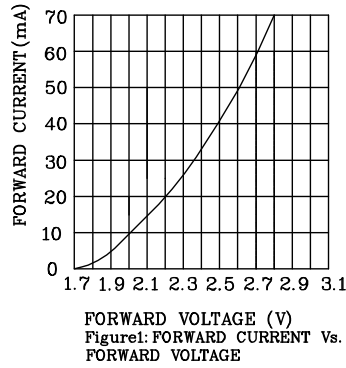
Operating Characteristics ($T_A=25^\circ\text{C}$)		ZE (InGaAlP)	Unit
Forward Voltage (Min.) ($I_F=70\text{mA}$)	V_F	2.6	V
Forward Voltage (Typ.) ($I_F=70\text{mA}$)	V_F	2.8	V
Forward Voltage (Max.) ($I_F=70\text{mA}$)	V_F	3.1	V
Reverse Current ($V_R=5\text{V}$)	I_R	10	uA
Wavelength of Peak Emission ($I_F=70\text{mA}$)	λ_P	640	nm
Wavelength of Dominant Emission ($I_F=70\text{mA}$)	λ_D	630	nm
Spectral Line Full Width At Half-Maximum ($I_F=70\text{mA}$)	$\Delta\lambda$	25	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	27	pF
Thermal Resistance	$R_{\theta j-pin}$	125	°C/W

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=70mA) mcd		Wavelength nm λ P	Viewing Angle 2θ 1/2
				min	typ.		
XSZE983W	Red	InGaAlP	Water Clear	6500	7990	640	70°

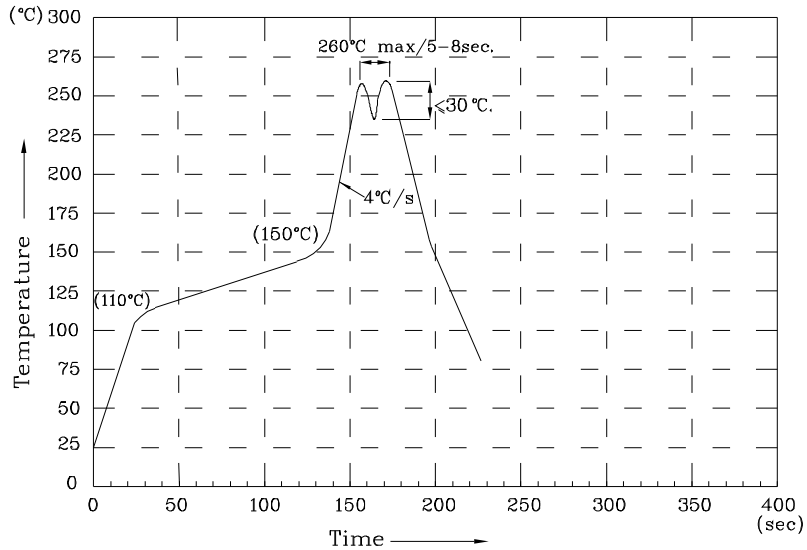
1. LUMINOUS INTENSITY IS MEASURED WITH AN INTEGRATING SPHERE AFTER THE DEVICE HAS STABILIZED.
 2. θ 1/2 IS THE ANGLE FROM OPTICAL CENTERLINE WHERE THE LUMINOUS INTENSITY IS 1/2 THE OPTICAL CENTERLINE VALUE.



❖ ZE



Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

- 1.Recommend the wave temperature 245°C~260°C.The maximum soldering temperature should be less than 260°C.
- 2.Do not apply stress on epoxy resins when temperature is over 85 degree°C.
- 3.The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
- 4.No more than once.

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.