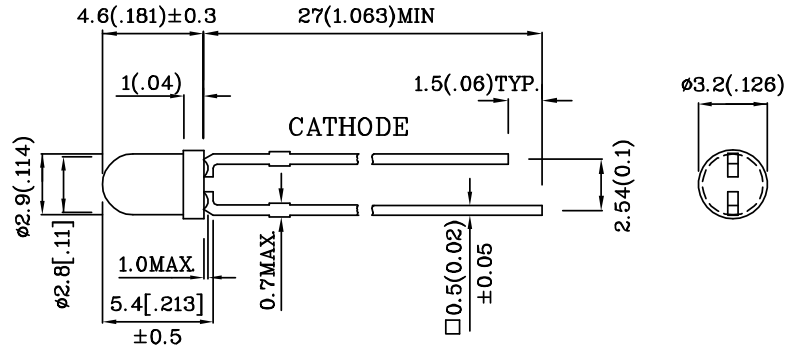


Features

- LOW POWER CONSUMPTION.
- POPULAR T-1 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.
- RoHS COMPLIANT.



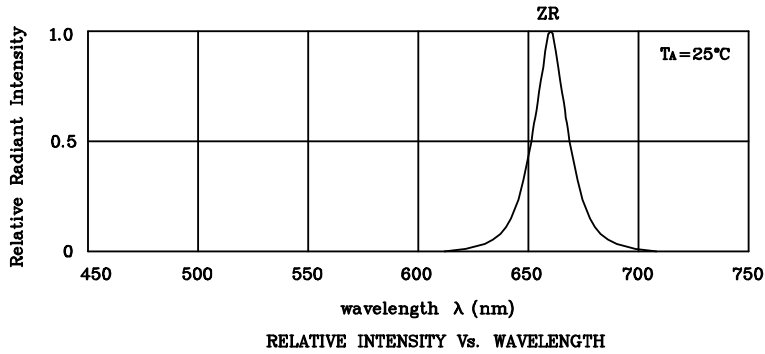
Notes:

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

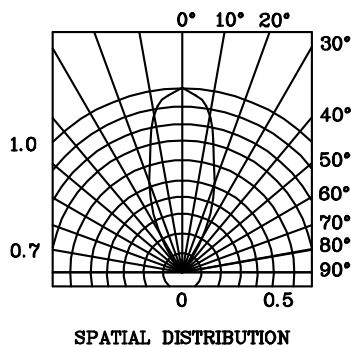
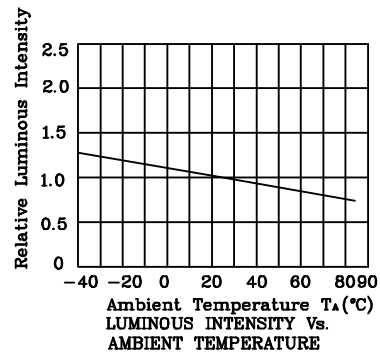
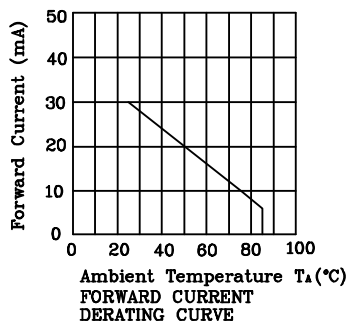
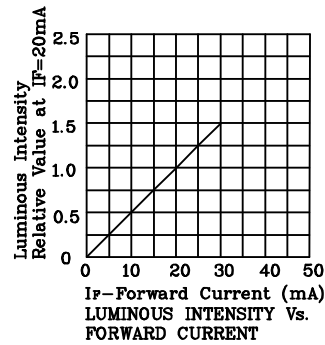
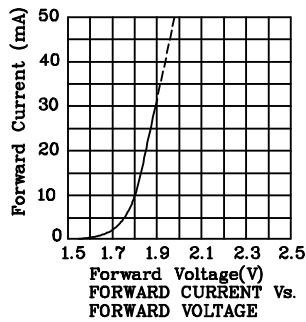
| Absolute Maximum Ratings ($T_A=25^\circ\text{C}$) | | ZR (GaAlAs) | Unit |
|--|---------------------|----------------|------|
| Reverse Voltage | V_R | 5 | V |
| Forward Current | I_F | 30 | mA |
| Forward Current (peak) 1/10 Duty Cycle 0.1ms Pulse Width | i_{FS} | 150 | mA |
| Power Dissipation | P_T | 100 | mW |
| Operating Temperature | T_A | -40 ~ +85 | °C |
| Storage Temperature | T_{stg} | -40 ~ +85 | |
| Lead Solder Temperature [2mm below package base] | 260°C For 3 Seconds | | |
| Lead Solder Temperature [5mm below package base] | 260°C For 5 Seconds | | |

| Operating Characteristics ($T_A=25^\circ\text{C}$) | | ZR (GaAlAs) | Unit |
|--|-----------------|----------------|---------------|
| Forward Voltage (typ.) ($I_F=20\text{mA}$) | V_F | 1.85 | V |
| Forward Voltage (max.) ($I_F=20\text{mA}$) | V_F | 2.5 | V |
| Reverse Current ($V_R=5\text{V}$) | I_R | 10 | μA |
| Wavelength of Peak Emission ($I_F=20\text{mA}$) | λ_P | 660 | nm |
| Wavelength of Dominant Emission ($I_F=20\text{mA}$) | λ_D | 640 | nm |
| Spectral Line Full Width At Half-Maximum ($I_F=20\text{mA}$) | $\Delta\lambda$ | 20 | nm |
| Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$) | C | 95 | pF |

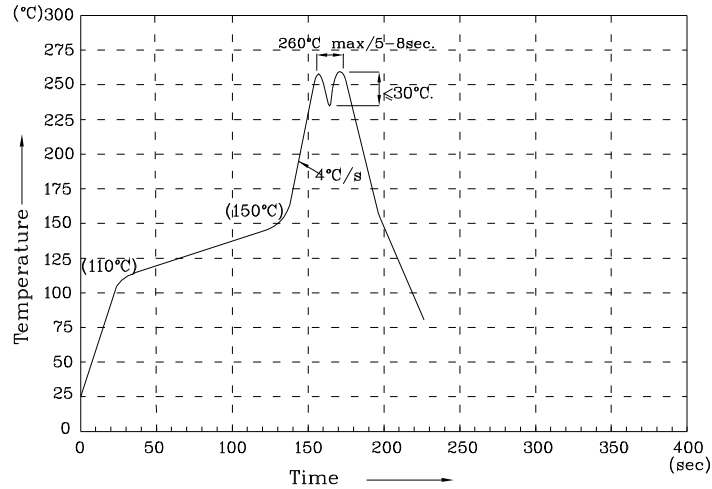
| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity ($I_F=20\text{mA}$) mcd | | Wavelength nm λ_P | Viewing Angle 2θ 1/2 |
|--|-------------------|----------------------|--------------|---|------|---------------------------------|-----------------------------------|
| | | | | min. | typ. | | |
| XLZR11DH | Red | GaAlAs | Red Diffused | 650 | 795 | 660 | 40° |
| Published Date : MAY 31, 2005 Drawing No : XDSA8123 V1 Checked : B.L.LIU P.1/3 | | | | | | | |



❖ ZR



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.