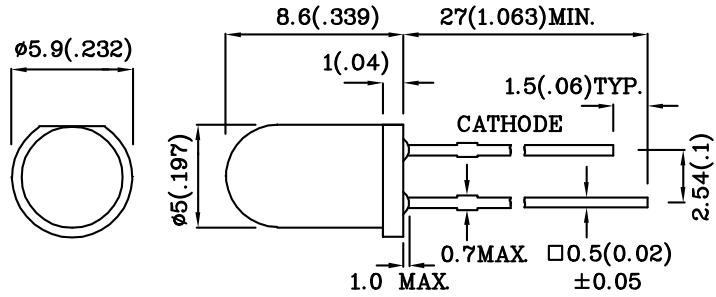


Features

- LOW POWER CONSUMPTION.
- POPULAR T-1 3/4 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.
- RoHS COMPLIANT.



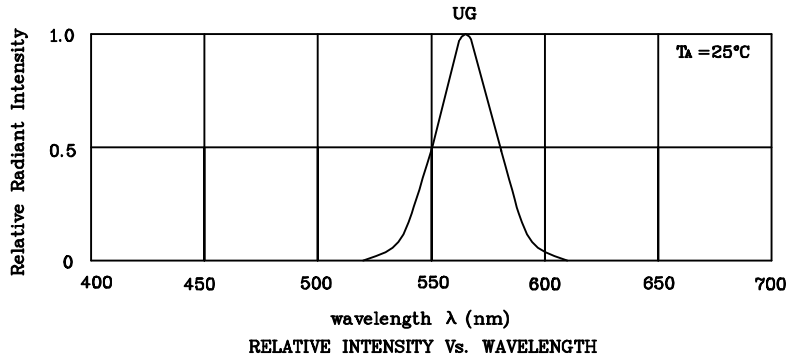
Notes:

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

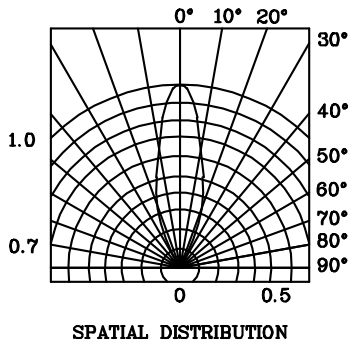
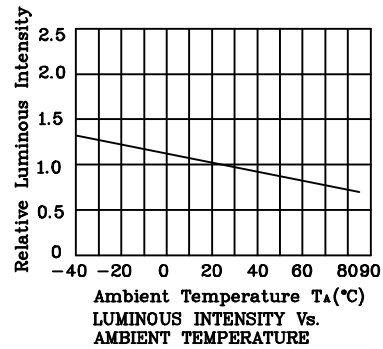
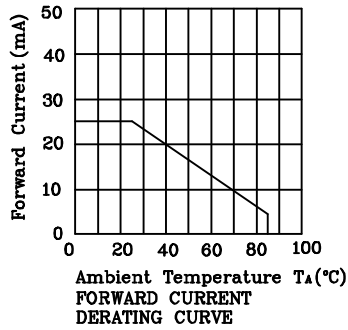
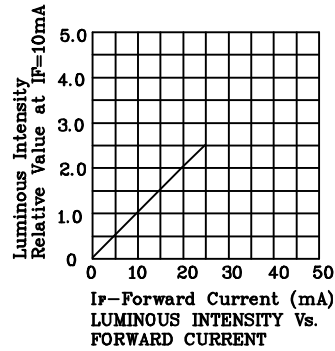
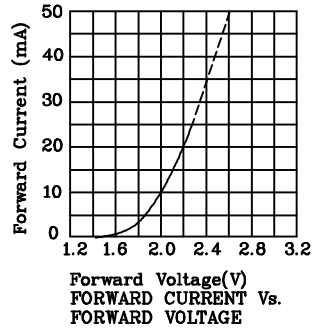
| Absolute maximum ratings ($T_A=25^\circ\text{C}$) | | UG (GaP) | Unit |
|---|---------------------|-------------|------|
| Reverse voltage | V_R | 5 | V |
| Forward current | I_F | 25 | mA |
| Forward current (peak) 1/10Duty cycle 0.1ms pulse width | i_{FS} | 140 | mA |
| Power dissipation | P_T | 105 | 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 ($T_A=25^\circ\text{C}$) | | UG (GaP) | Unit |
|---|-------------------------|-------------|------|
| Forward voltage (typ.) ($I_F=10\text{mA}$) | V_F | 2.0 | V |
| Forward voltage (max.) ($I_F=10\text{mA}$) | V_F | 2.5 | V |
| Reverse current ($V_R=5\text{V}$) | I_R | 10 | uA |
| Wavelength at peak emission ($I_F=10\text{mA}$) | λ_{peak} | 565 | nm |
| Wavelength of dominant emission ($I_F=10\text{mA}$) | λ_D | 568 | nm |
| Spectral Line half-width ($I_F=10\text{mA}$) | $\Delta\lambda$ | 30 | nm |
| Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$) | C | 15 | pF |

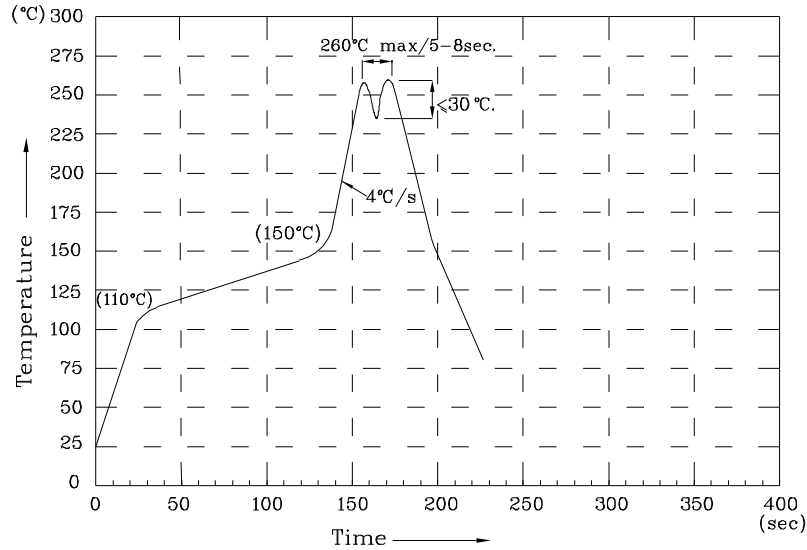
| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity ($I_F=10\text{mA}$) mcd | | Wavelength nm λ_P | Viewing Angle $2\theta_{1/2}$ |
|-------------|----------------|-------------------|----------------|--|------|---------------------------------|----------------------------------|
| | | | | min. | typ. | | |
| XLUG12D | Green | GaP | Green Diffused | 5 | 19 | 565 | 30° |



❖ UG



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.