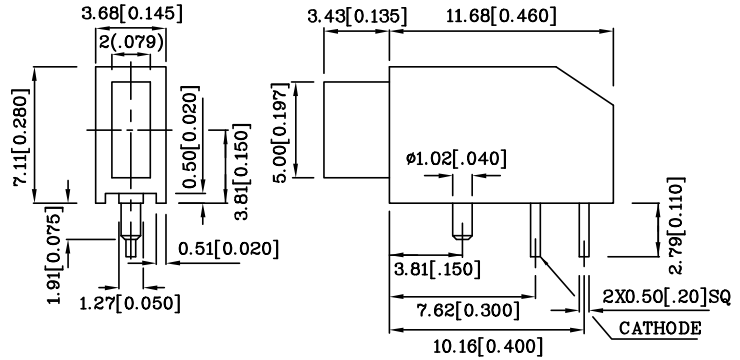


**Features**

- PRE-TRIMMED LEADS FOR PC MOUNTING.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.



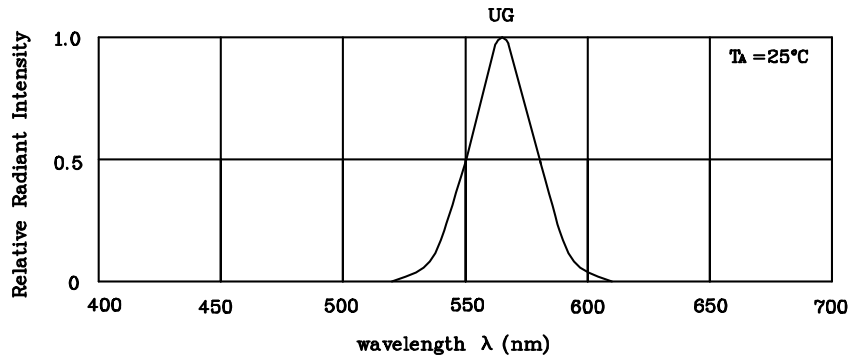
Notes:

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

| Absolute maximum ratings<br>(TA=25°C)                         |                     | UG<br>(GaP) | Unit |
|---|---------------------|-------------|------|
| Reverse voltage   | VR                  | 5           | V    |
| Forward current   | IF                  | 25          | mA   |
| Forward current (peak)<br>1/10Duty cycle<br>0.1ms pulse width | iFS                 | 140         | mA   |
| Power dissipation   | PT                  | 105         | mW   |
| Operating temperature   | TA                  | -40 ~ +85   | °C   |
| Storage temperature   | Tstg                | -40 ~ +85   |      |
| Lead solder temperature<br>[2mm below package<br>base]        | 260°C For 5 Seconds |             |      |

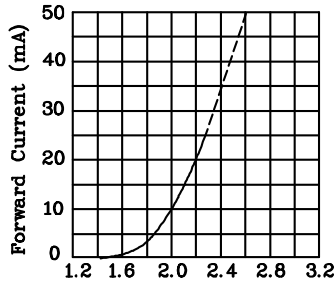
| Operating Characteristics<br>(TA=25°C)          |                 | UG<br>(GaP) | Unit |
|---|-----------------|-------------|------|
| Forward voltage (typ.)<br>(IF=10mA)             | VF              | 2.0         | V    |
| Forward voltage (max.)<br>(IF=10mA)             | VF              | 2.5         | V    |
| Reverse current<br>(VR=5V)                      | IR              | 10          | uA   |
| Wavelength at peak<br>emission<br>(IF=10mA)     | $\lambda$ peak  | 565         | nm   |
| Wavelength at Dominate<br>emission<br>(IF=10mA) | $\lambda$ D     | 568         | nm   |
| Spectral Line half-width<br>(IF=10mA)           | $\Delta\lambda$ | 30          | nm   |
| Capacitance<br>(VF=0V, f=1MHz)                  | C               | 15          | pF   |

| Part Number   | Emitting Color | Emitting Material | Lens-color     | Luminous Intensity<br>(IF=10mA)<br>mcd |      | Wavelength<br>nm<br>$\lambda$ P | Viewing Angle<br>2 $\theta$ 1/2 |
|---|----------------|-------------------|----------------|--|------|---------------------------------|---------------------------------|
|   |                |                   |                | min.                                   | typ. |                                 |                                 |
| XYG1SUG18D  | Green          | GaP               | Green Diffused | 1.8                                    | 4.5  | 565                             | 110°                            |
| Published Date : SEP 28,2003      Drawing No : XDSA2958      V2      Checked : B.L.LIU      P.1/2 |                |                   |                |  |      |                                 |                                 |

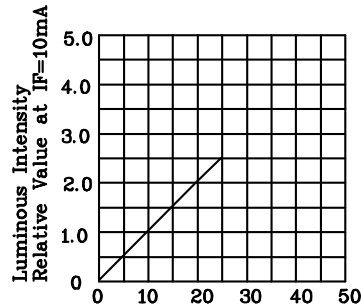


RELATIVE INTENSITY Vs. WAVELENGTH

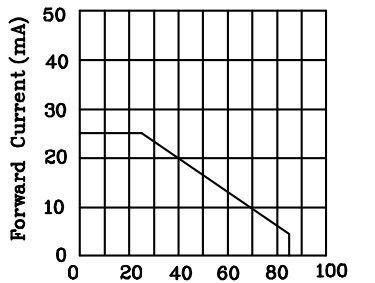
❖ UG



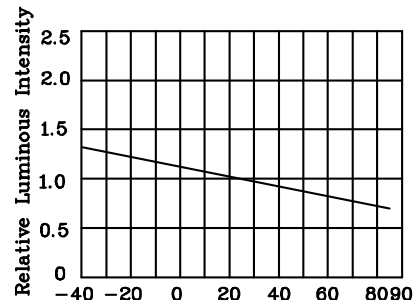
Forward Voltage(V)  
 FORWARD CURRENT Vs.  
 FORWARD VOLTAGE



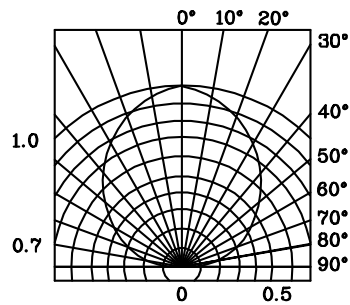
$I_F$ —Forward Current (mA)  
 LUMINOUS INTENSITY Vs.  
 FORWARD CURRENT



Ambient Temperature  $T_A$ (°C)  
 FORWARD CURRENT  
 DERATING CURVE



Ambient Temperature  $T_A$ (°C)  
 LUMINOUS INTENSITY Vs.  
 AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION