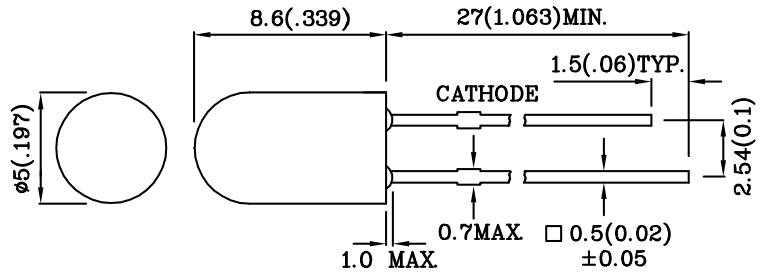


Features

- LOW POWER CONSUMPTION.
- VERSATILE MOUNTING ON P.C. BOARD OR PANEL.
- T-1 3/4 DIAMETER FLANGELESS PACKAGE.
- RELIABLE AND RUGGED.
- RoHS COMPLIANT.



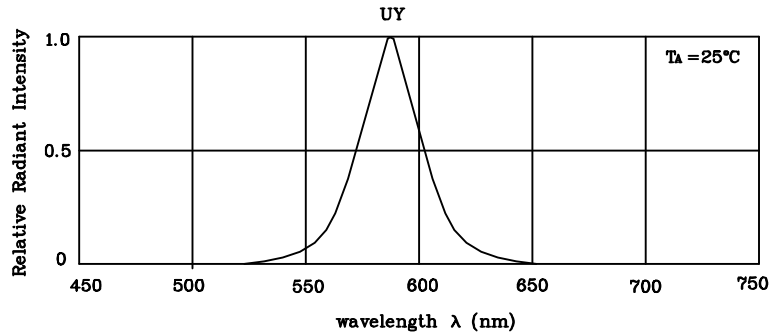
Notes:

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

| Absolute maximum ratings (TA=25°C) | | UY (GaAsP/ GaP) | Unit |
|--|---------------------|-----------------------|------|
| Reverse Voltage | VR | 5 | V |
| Forward Current | IF | 30 | mA |
| Forward Current (Peak) 1/10 Duty Cycle 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 [2mm Below Package Base] | 260°C For 3 Seconds | | |
| Lead Solder Temperature [5mm Below Package Base] | 260°C For 5 Seconds | | |

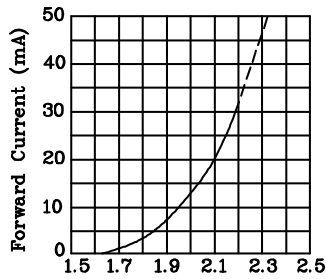
| Operating Characteristics (TA=25°C) | | UY (GaAsP/ GaP) | Unit |
|--|-----------------|-----------------------|------|
| Forward Voltage (Typ.) (IF=10mA) | VF | 1.95 | V |
| Forward Voltage (Max.) (IF=10mA) | VF | 2.5 | V |
| Reverse Current (VR=5V) | IR | 10 | uA |
| Wavelength of Peak Emission (IF=10mA) | λP | 590 | nm |
| Wavelength of Dominant Emission (IF=10mA) | λD | 588 | nm |
| Spectral Line Full Width At Half-Maximum (IF=10mA) | $\Delta\lambda$ | 35 | nm |
| Capacitance (VF=0V, f=1MHz) | C | 20 | pF |

| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity (IF=10mA) mcd | | Wavelength nm λP | Viewing Angle $2\theta 1/2$ |
|------------------------------|-------------------|----------------------|--------------------|---|------|---------------------------------|-----------------------------------|
| | | | | min. | typ. | | |
| XLUY50C | Yellow | GaAsP/GaP | Yellow Transparent | 18 | 39 | 590 | 30° |
| Published Date : MAY 25,2005 | | | | Drawing No : XDSA2400 | | V3 | |
| | | | | Checked : B.L.LIU | | P.1/3 | |

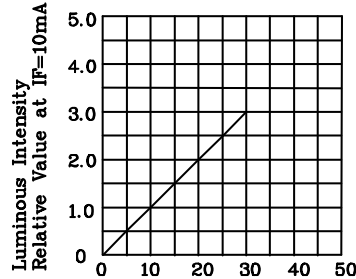


RELATIVE INTENSITY Vs. WAVELENGTH

❖ UY



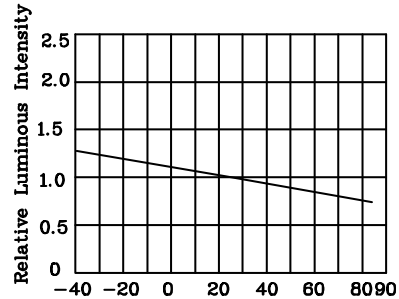
Forward Voltage(V)
FORWARD CURRENT Vs.
FORWARD VOLTAGE



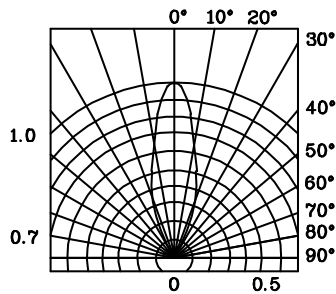
I_f -Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



Ambient Temperature T_a (°C)
FORWARD CURRENT
DERATING CURVE

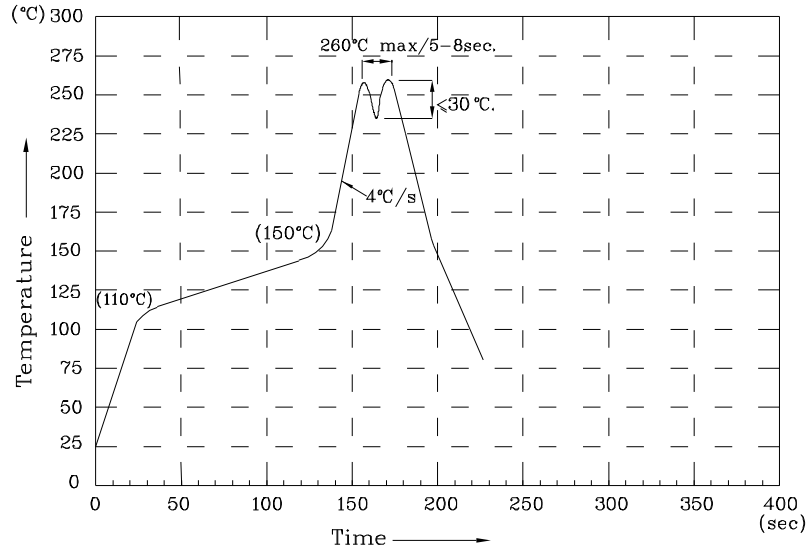


Ambient Temperature T_a (°C)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

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.