SunLED
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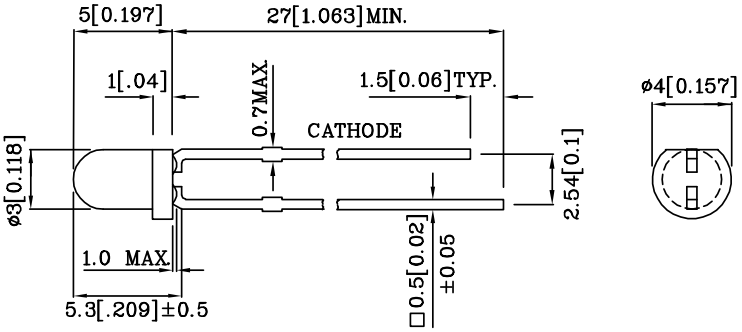
**Part Number:** **XLUY34D**

T-1 (3mm) SOLID STATE LAMP

## 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.



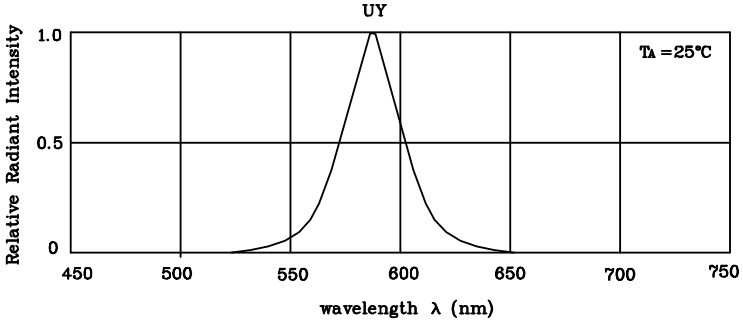

Notes:

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

| **Absolute maximum ratings ($T_A$=25°C)** | | **UY (GaAsP/ GaP)** | **Unit** |
|---|---|---|---|
| Reverse Voltage | $V_R$ | 5 | V |
| Forward Current | $I_F$ | 30 | mA |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | $i_{FS}$ | 140 | mA |
| Power Dissipation | $P_T$ | 105 | mW |
| Operating Temperature | $T_A$ | -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 | | |

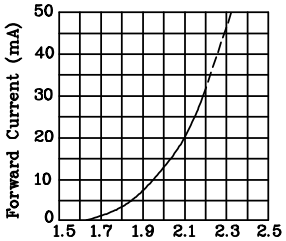
| **Operating Characteristics ($T_A$=25°C)** | | **UY (GaAsP/ GaP)** | **Unit** |
|---|---|---|---|
| Forward Voltage (Typ.) ($I_F$=10mA) | $V_F$ | 1.95 | V |
| Forward Voltage (Max.) ($I_F$=10mA) | $V_F$ | 2.5 | V |
| Reverse Current ($V_R$=5V) | $I_R$ | 10 | uA |
| Wavelength of Peak Emission ($I_F$=10mA) | λ P | 590 | nm |
| Wavelength of Dominant Emission ($I_F$=10mA) | λ D | 588 | nm |
| Spectral Line Full Width At Half-Maximum ($I_F$=10mA) | Δλ | 35 | nm |
| Capacitance ($V_F$=0V, f=1MHz) | C | 20 | pF |

| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity (IF=10mA) mcd | | Wavelength nm λ P | Viewing Angle 2 θ 1/2 |
|---|---|---|---|---|---|---|---|
| | | | | min. | typ. | | |
| XLUY34D | Yellow | GaAsP/GaP | Yellow Diffused | 1.8 | 5 | 590 | 60° |

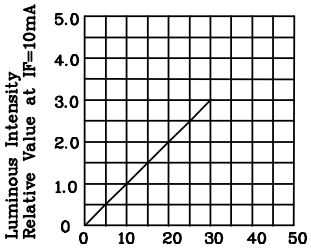



RELATIVE INTENSITY Vs. WAVELENGTH

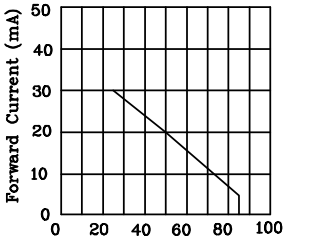
## ❖ UY



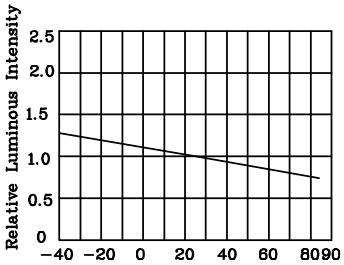

FORWARD CURRENT Vs. FORWARD VOLTAGE



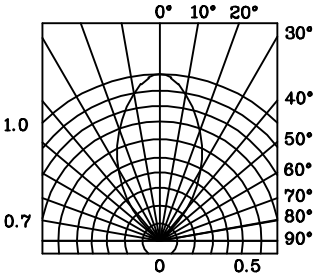

LUMINOUS INTENSITY Vs. FORWARD CURRENT




FORWARD CURRENT DERATING CURVE




LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE




SPATIAL DISTRIBUTION

Remarks:

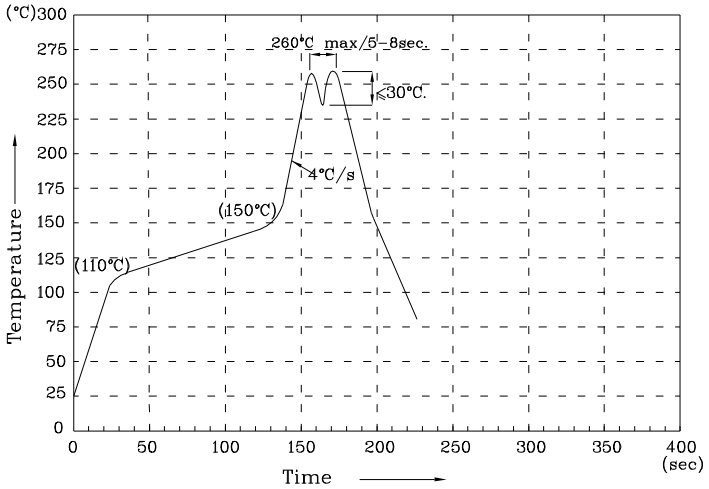
If special sorting is required (e.g. binning based on forward voltage, luminous intensity or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

**XLUY34D**

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.