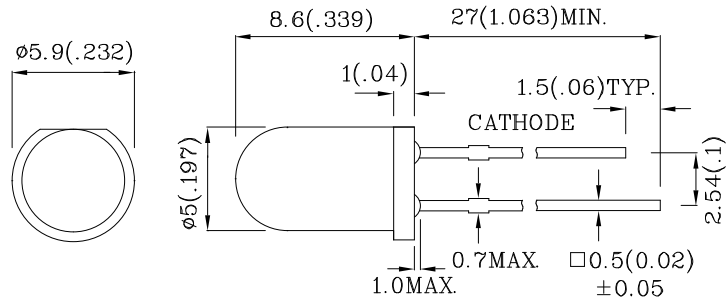


**Features**

- 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.



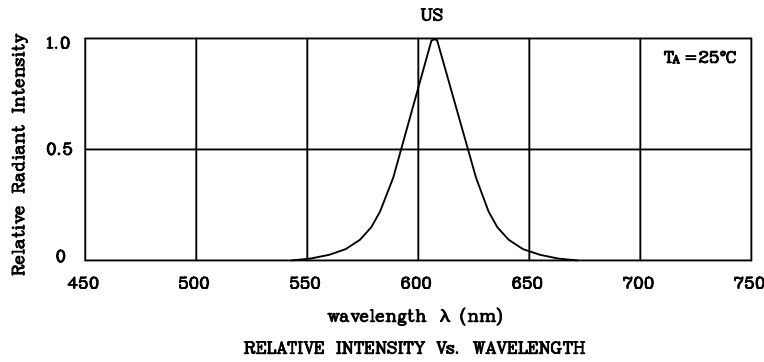
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

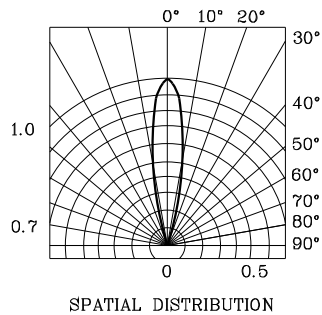
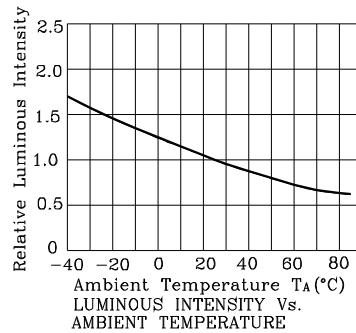
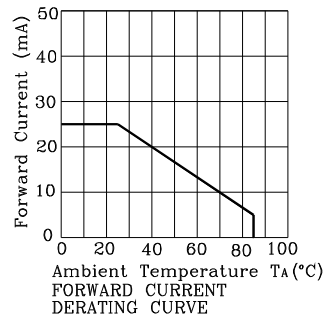
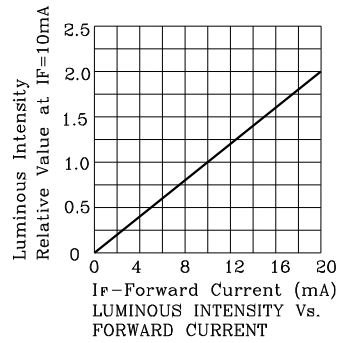
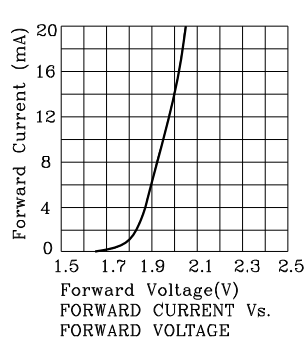
| Absolute Maximum Ratings<br>(TA=25°C)                          |                     | US<br>(GaAsP/GaP) | Unit |
|--|---------------------|-------------------|------|
| Reverse Voltage  | VR                  | 5                 | V    |
| Forward Current  | IF                  | 25                | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | iFS                 | 145               | mA   |
| Power Dissipation  | PT                  | 62.5              | mW   |
| Operating Temperature  | TA                  | -40 ~ +85         | °C   |
| Storage Temperature  | Tstg                | -40 ~ +85         |      |
| Lead Solder Temperature<br>[2mm Below Package Base]            | 260°C For 3 Seconds |                   |      |
| Lead Solder Temperature<br>[5mm Below Package Base]            | 260°C For 5 Seconds |                   |      |

| Operating Characteristics<br>(TA=25°C)                          |     | US<br>(GaAsP/GaP) | Unit |
|---|-----|-------------------|------|
| Forward Voltage (Typ.)<br>(IF=10mA)                             | VF  | 1.95              | V    |
| Forward Voltage (Max.)<br>(IF=10mA)                             | VF  | 2.5               | V    |
| Reverse Current (Max.)<br>(VR=5V)                               | IR  | 10                | uA   |
| Wavelength Of Peak<br>Emission (Typ.)<br>(IF=10mA)              | λ P | 607               | nm   |
| Wavelength Of Dominant<br>Emission (Typ.)<br>(IF=10mA)          | λ D | 610               | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(IF=10mA) | Δλ  | 35                | nm   |
| Capacitance (Typ.)<br>(VF=0V, f=1MHz)                           | C   | 15                | pF   |

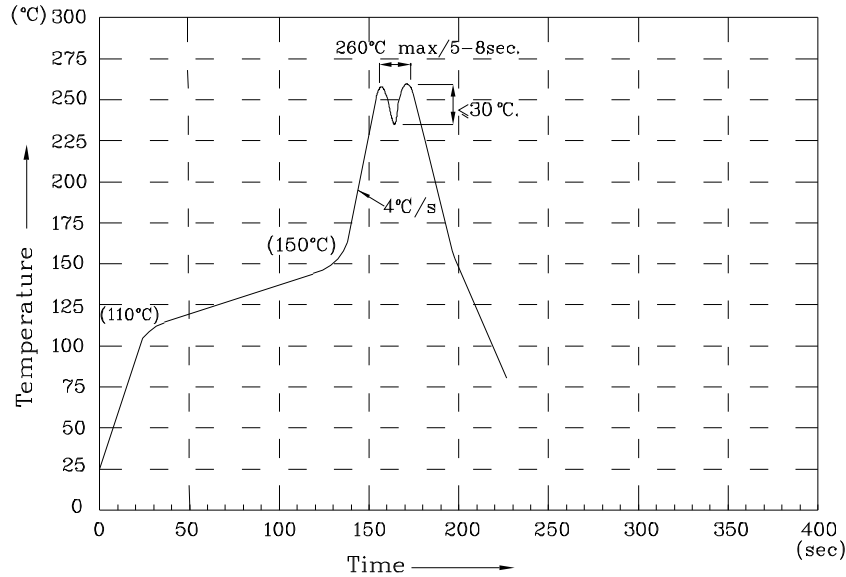
| Part Number | Emitting Color | Emitting Material | Lens-color  | Luminous Intensity<br>(IF=10mA)<br>mcd |      | Wavelength<br>nm<br>λ P | Viewing Angle<br>2 θ 1/2 |
|-------------|----------------|-------------------|-------------|--|------|-------------------------|--------------------------|
|             |                |                   |             | min.                                   | typ. |                         |                          |
| XLUS12W     | Orange         | GaAsP/GaP         | Water Clear | 40                                     | 79   | 607                     | 20°                      |



❖ **US**



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:

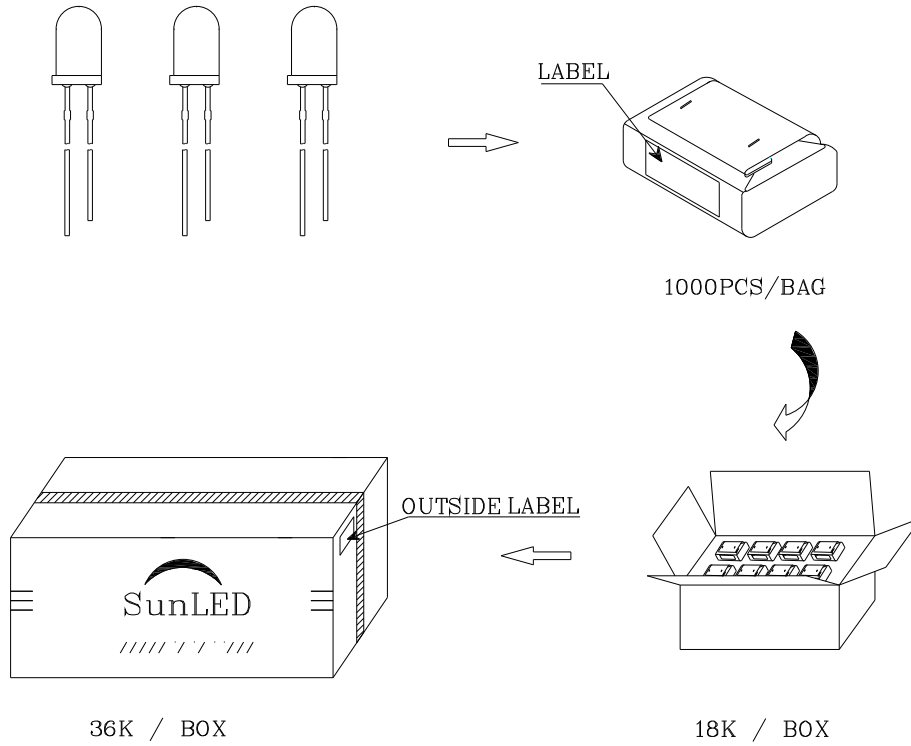

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

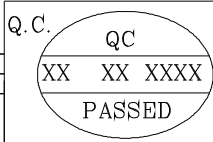

1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**XLUS12W**

|   |           |
|---|-----------|
|                           |           |
| P/NO : XLxx12x  |           |
| QTY : 1000 pcs  | CODE: XXX |
| S/N : XX  |           |
| LOT NO:   |           |
| <br>XXXXXXXXXXXXXXXXXXXXX |           |
| RoHS Compliant  |           |