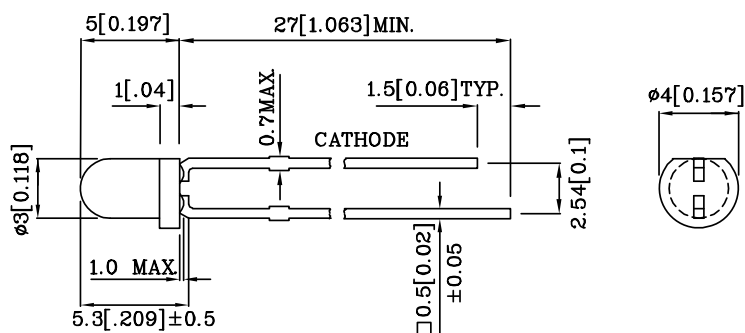


## Features

- 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.



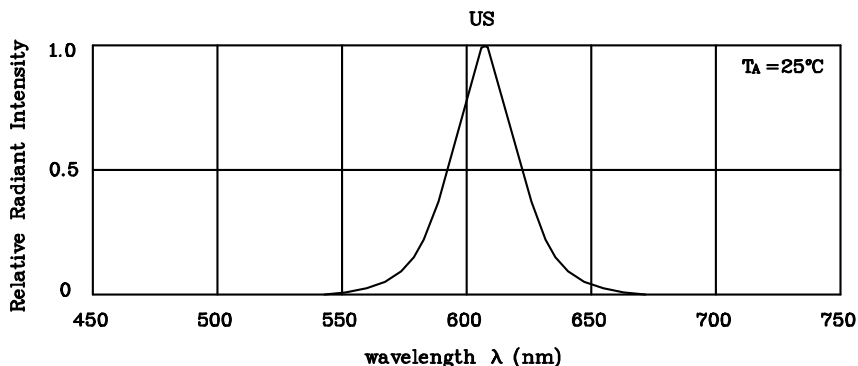
Notes:

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

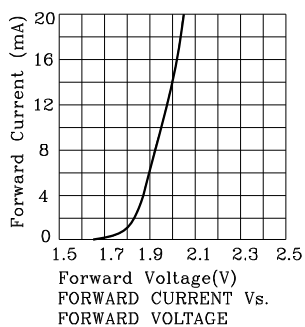
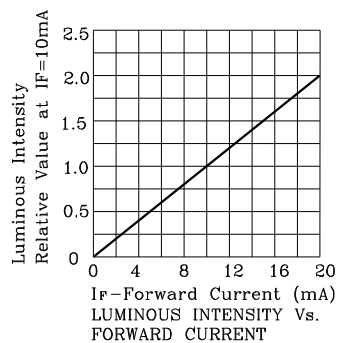
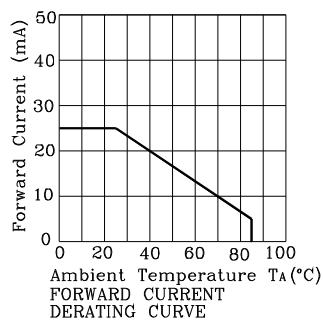
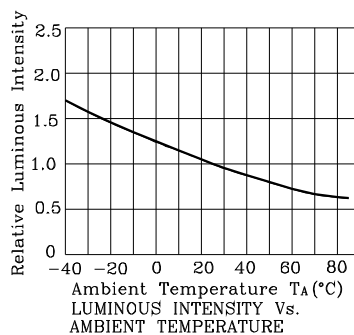
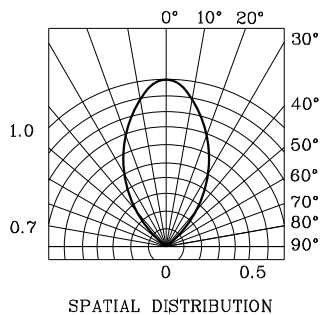
| Operating Characteristics<br>(TA=25°C)                          |                | US<br>(GaAsP/GaP) | Unit |
|-----------------------------------------------------------------|----------------|-------------------|------|
| Forward Voltage (Typ.)<br>(IF=10mA)                             | V <sub>F</sub> | 1.95              | V    |
| Forward Voltage (Max.)<br>(IF=10mA)                             | V <sub>F</sub> | 2.5               | V    |
| Reverse Current (Max.)<br>(V <sub>R</sub> =5V)                  | I <sub>R</sub> | 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>(V <sub>F</sub> =0V, f=1MHz)              | C              | 15                | pF   |

| Part Number                  | Emitting Color | Emitting Material     | Lens-color      | Luminous Intensity (IF=10mA)<br>mcd | Wavelength<br>nm<br>λ P | Viewing Angle<br>2 θ 1/2 |
|------------------------------|----------------|-----------------------|-----------------|-------------------------------------|-------------------------|--------------------------|
|                              |                |                       |                 | min.                                | typ.                    |                          |
| LUS34D                       | Orange         | GaAsP/GaP             | Orange Diffused | 8                                   | 19                      | 607                      |
|                              |                |                       |                 |                                     |                         |                          |
|                              |                |                       |                 |                                     |                         |                          |
| Published Date : MAR 21 2008 |                | Drawing No : SDSA2770 |                 | V3                                  | Checked : B.L.LIU       | P.1/4                    |

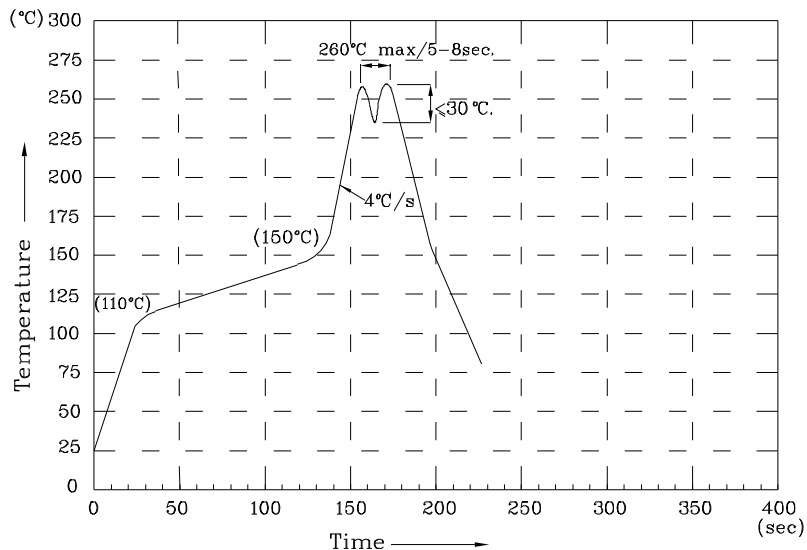


RELATIVE INTENSITY Vs. WAVELENGTH

❖ 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:

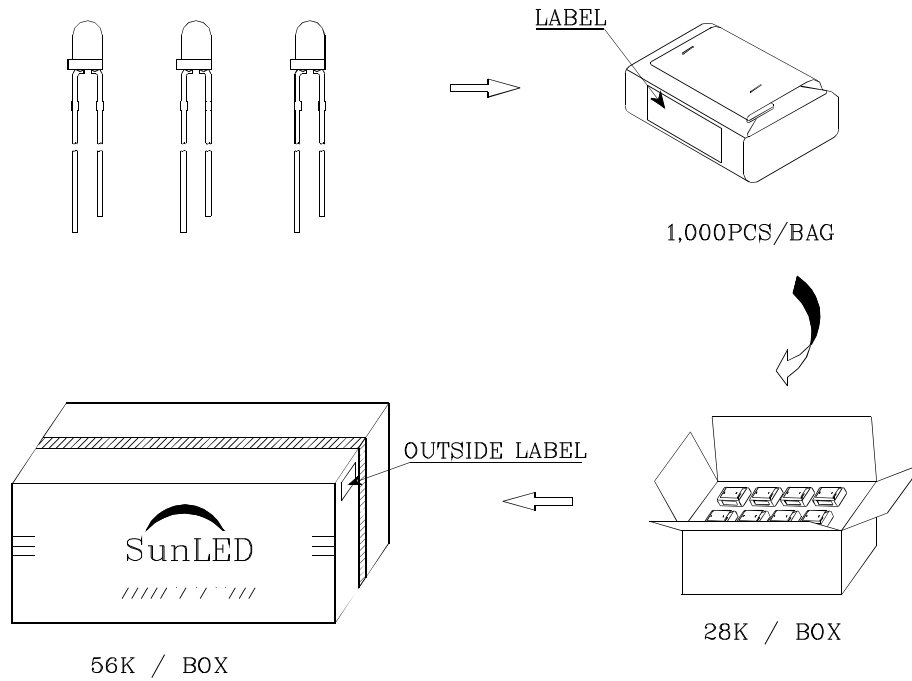
If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

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**

**LUS34D**



|                                                                                                                         |  |                                     |
|-------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------|
|                                      |  | Q.C.<br>Q C<br>XX XX XXXX<br>PASSED |
| P/N0 : Lxx34x                                                                                                           |  |                                     |
| QTY : 1,000 pcs                                                                                                         |  | CODE: XXX                           |
| S/N : XX                                                                                                                |  |                                     |
| LOT NO:<br><br>XXXXXXXXXXXXXXXXXXXX |  |                                     |
| RoHS Compliant                                                                                                          |  |                                     |