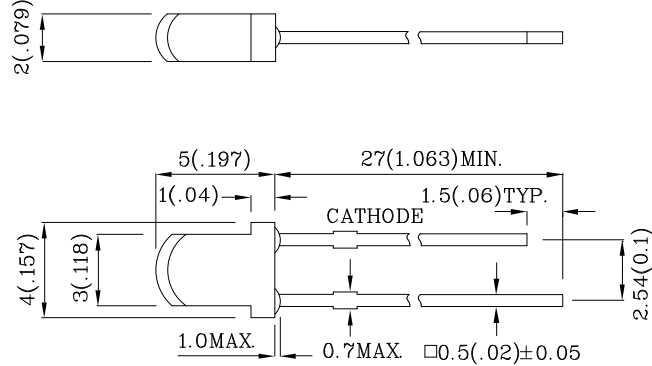


**Features**

- LOW POWER CONSUMPTION.
- ULTRA BRIGHTNESS IS AVAILABLE .
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- SUITABLE FOR LEVEL INDICATOR.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.



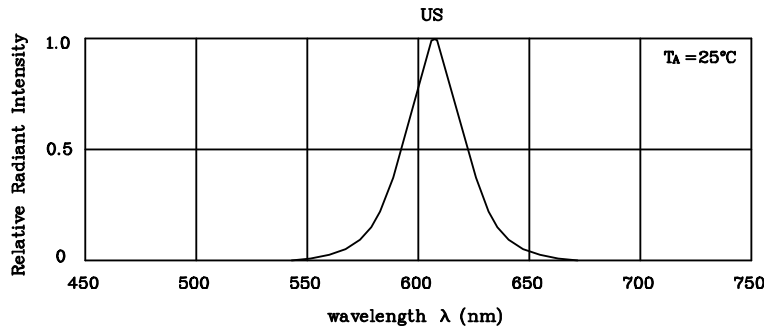
Notes:

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  | V <sub>R</sub>      | 5                 | V    |
| Forward Current  | I <sub>F</sub>      | 25                | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | i <sub>FS</sub>     | 145               | mA   |
| Power Dissipation  | P <sub>T</sub>      | 62.5              | mW   |
| Operating Temperature  | T <sub>A</sub>      | -40 ~ +85         | °C   |
| Storage Temperature  | T <sub>stg</sub>    | -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 |                   |      |

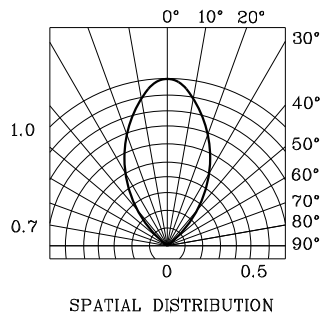
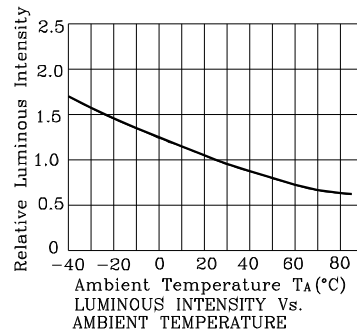
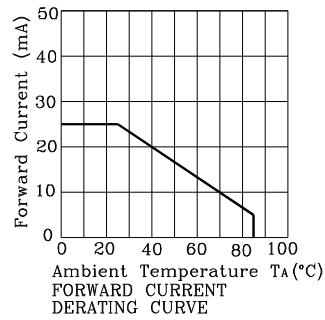
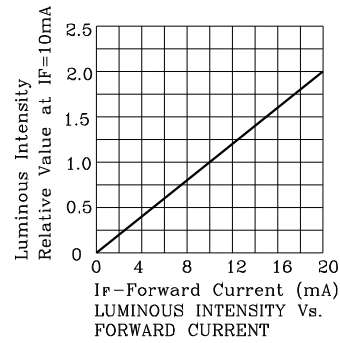
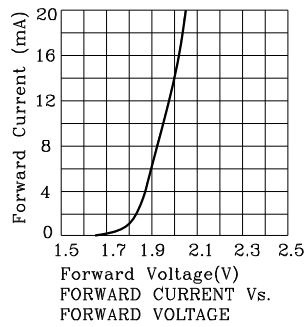
| Operating Characteristics<br>(TA=25°C)                                       |                | US<br>(GaAsP/GaP) | Unit |
|--|----------------|-------------------|------|
| Forward Voltage (Typ.)<br>(I <sub>F</sub> =10mA)                             | V <sub>F</sub> | 1.95              | V    |
| Forward Voltage (Max.)<br>(I <sub>F</sub> =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>(I <sub>F</sub> =10mA)              | λ P            | 607               | nm   |
| Wavelength Of Dominant<br>Emission (Typ.)<br>(I <sub>F</sub> =10mA)          | λ D            | 610               | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(I <sub>F</sub> =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<br>(I <sub>F</sub> =10mA) |      | Wavelength<br>nm<br>λ P | Viewing Angle<br>2 θ 1/2 |
|--|----------------|-------------------|-----------------|--|------|-------------------------|--------------------------|
|  |                |                   |                 | min.   | typ. |                         |                          |
| XSUS76D  | Orange         | GaAsP/GaP         | Orange Diffused | 8  | 17   | 607                     | 60°                      |
| Published Date : JAN 16, 2008      Drawing No : XDSA2532      V4      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:

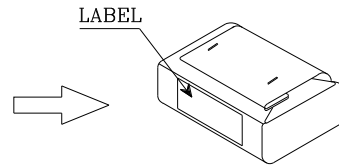
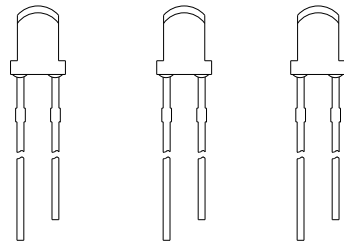
If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

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

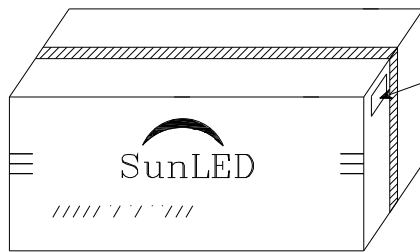
Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**XSUS76D**

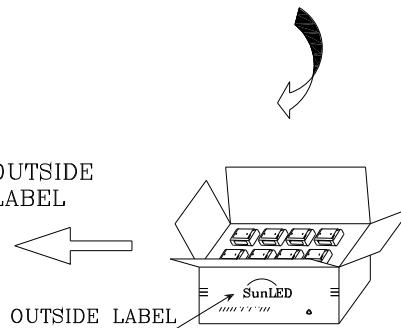


1000 PCS/ Bag



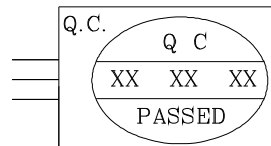
56K / BOX


OUTSIDE LABEL



OUTSIDE LABEL

28K / BOX



|  |           |
|--|-----------|
| P/NO : XSxx76x   | FQC       |
| QTY : 1000 pcs   | CODE: XXX |
| S/N : XX   |           |
| LOT NO:  |           |
| <br>xxxxxxxxxxxxxxxxxxxxxxxxxxxx |           |
| RoHS Compliant   |           |