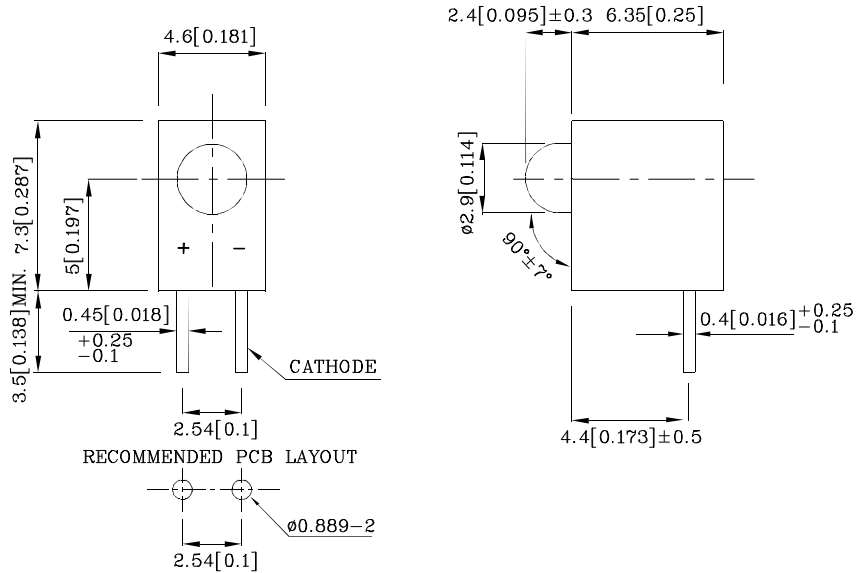


Features

- Housing material: Type 66 Nylon
- Black casing provides superior contrast
- Housing UL rating: 94V-0
- Reliable & robust
- RoHS Compliant



Package Schematics



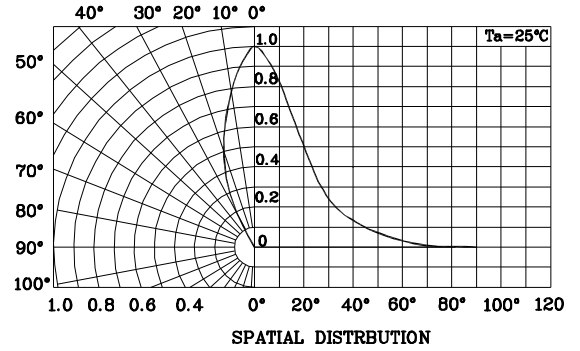
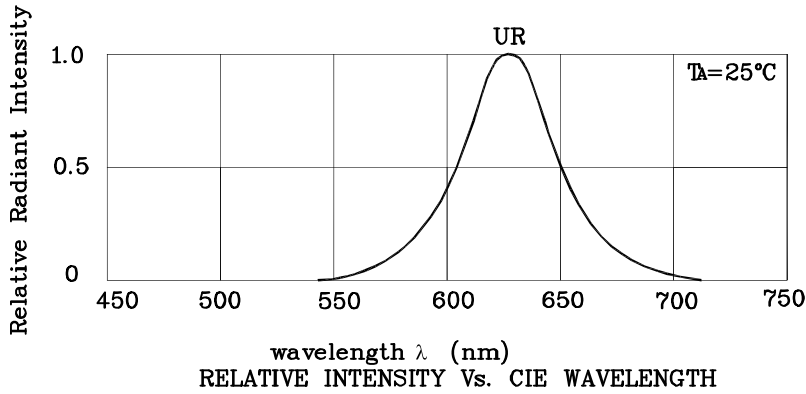
- Notes:
1. All dimensions are in millimeters (inches).
 2. Tolerance is ±0.25(0.01") unless otherwise noted.
 3. Specifications are subject to change without notice.

| Absolute Maximum Ratings (T _A =25°C) | | UR (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} | 160 | mA |
| Power Dissipation | P _D | 75 | mW |
| Operating Temperature | T _A | -40 ~ +85 | °C |
| Storage Temperature | T _{stg} | -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 | | |

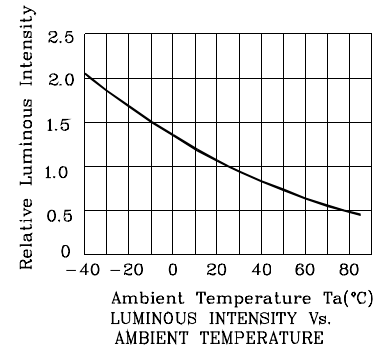
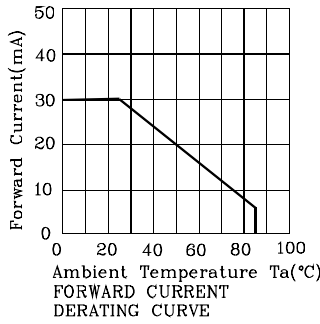
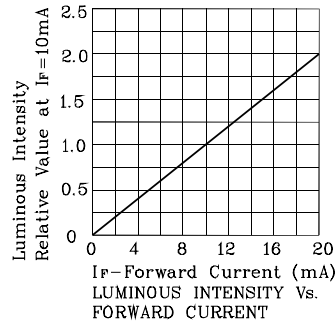
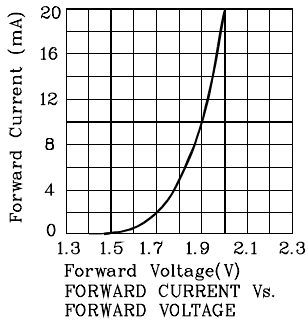
| Operating Characteristics (T _A =25°C) | | UR (GaAsP/GaP) | Unit |
|--|----------------|-------------------|------|
| Forward Voltage (Typ.) (I _F =10mA) | V _F | 1.9 | V |
| Forward Voltage (Max.) (I _F =10mA) | V _F | 2.5 | V |
| Reverse Current (Max.) (V _R =5V) | I _R | 10 | uA |
| Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =10mA) | λ _P | 627* | nm |
| Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =10mA) | λ _D | 617* | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) (I _F =10mA) | Δλ | 45 | nm |
| Capacitance (Typ.) (V _F =0V, f=1MHz) | C | 15 | pF |

| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity CIE127-2007* (I _F =10mA) mcd | | Wavelength CIE127-2007* nm λ _P | Viewing Angle 2θ 1/2 |
|-------------|----------------|-------------------|--------------|---|-----------|--|-------------------------|
| | | | | min. | typ. | | |
| XVB1LUR147D | Red | GaAsP/GaP | Red Diffused | 12 6* | 24 11* | 627* | 40° |

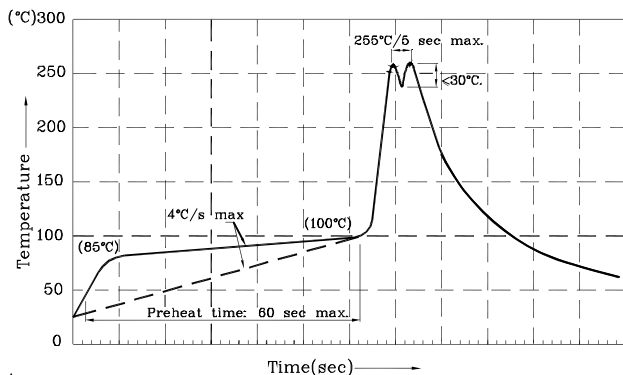
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



❖ UR



Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



Notes:

1. Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 280°C
2. Peak wave soldering temperature between 245°C ~ 255°C for 3 sec (5 sec max).
3. Do not apply stress to the epoxy resin while the temperature is above 85°C.
4. Fixtures should not incur stress on the component when mounting and during soldering process.
5. SAC 305 solder alloy is recommended.
6. No more than one wave soldering pass.

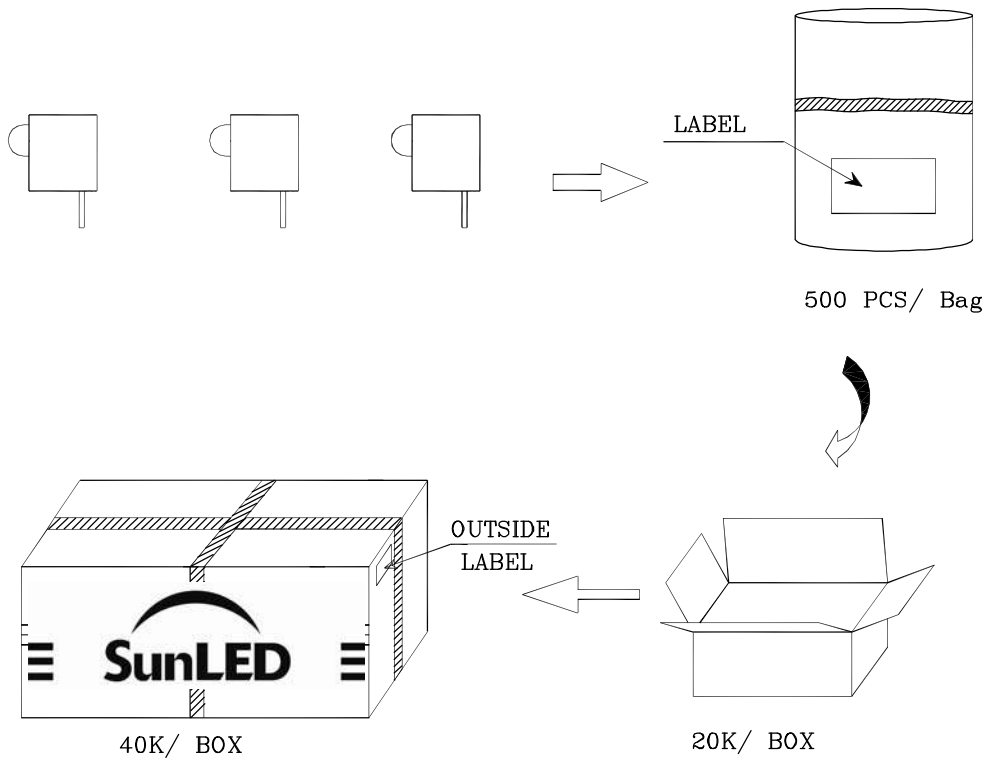
Remarks:



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



| | | |
|--|-----------|----------------------------------|
|  | | Q.C. Q.C XX XX XXXX PASSED |
| P/NO : XVB1Lxx147x | | FQC |
| QTY : 500 pcs | CODE: XXX | |
| S/N : XX | | |
| LOT NO: | | |
|  xxxxxxxxxxxxxxxxxxxxxxxxxxxx | | |
| RoHS Compliant | | |

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