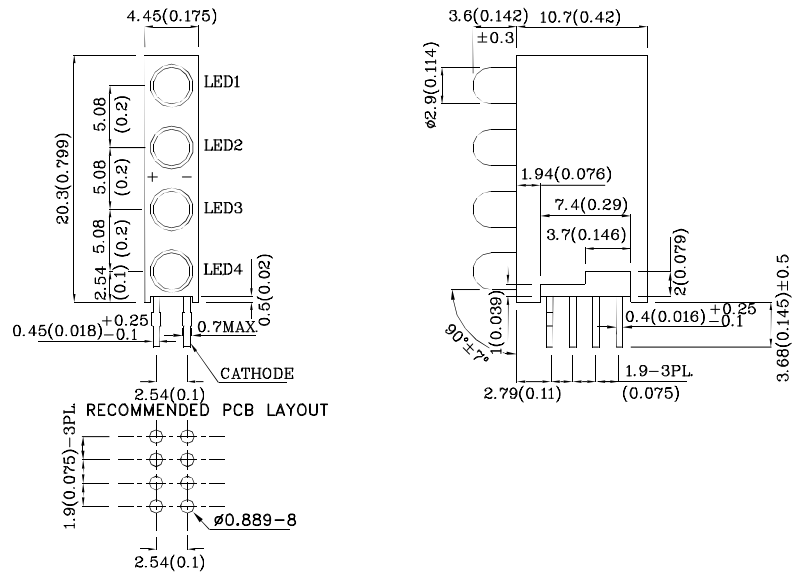


Features

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



Package Schematics



Notes:

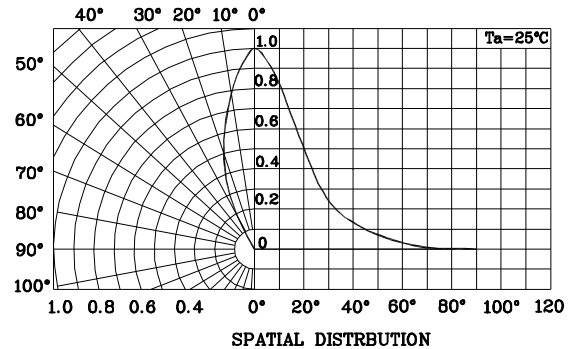
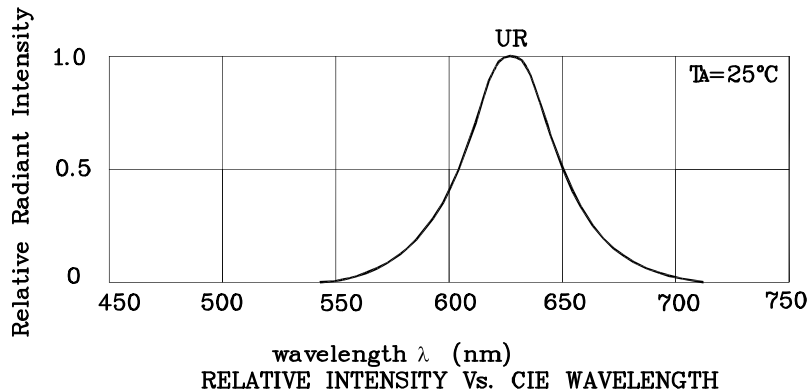
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.

| Absolute Maximum Ratings (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 | | |

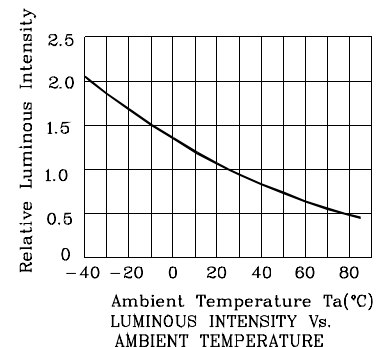
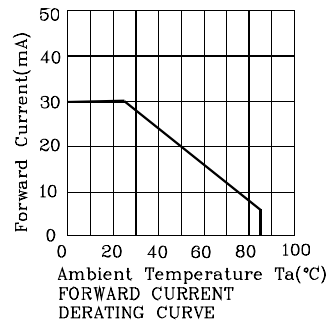
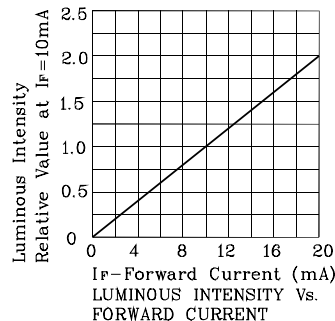
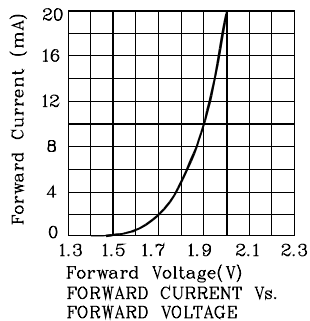
| Operating Characteristics ($T_A=25^\circ\text{C}$) | | UR (GaAsP/GaP) | Unit |
|---|-----------------|-------------------|---------------|
| Forward Voltage (Typ.) ($I_F=10\text{mA}$) | V_F | 1.9 | V |
| Forward Voltage (Max.) ($I_F=10\text{mA}$) | V_F | 2.5 | V |
| Reverse Current (Max.) ($V_R=5\text{V}$) | I_R | 10 | μA |
| Wavelength of Peak Emission CIE127-2007* (Typ.) ($I_F=10\text{mA}$) | λ_P | 627* | nm |
| Wavelength of Dominant Emission CIE127-2007* (Typ.) ($I_F=10\text{mA}$) | λ_D | 617* | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=10\text{mA}$) | $\Delta\lambda$ | 45 | nm |
| Capacitance (Typ.) ($V_F=0\text{V}$, $f=1\text{MHz}$) | C | 15 | pF |

| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity CIE127-2007* ($I_F=10\text{mA}$) mcd | | Wavelength CIE127-2007* nm λ_P | Viewing Angle 2 θ 1/2 |
|----------------|-------------------|----------------------|--------------|--|-----------|---|------------------------------------|
| | | | | min. | typ. | | |
| XWA4LUR147D | Red | GaAsP/GaP | Red Diffused | 12 6* | 24 11* | 627* | 40 $^\circ$ |

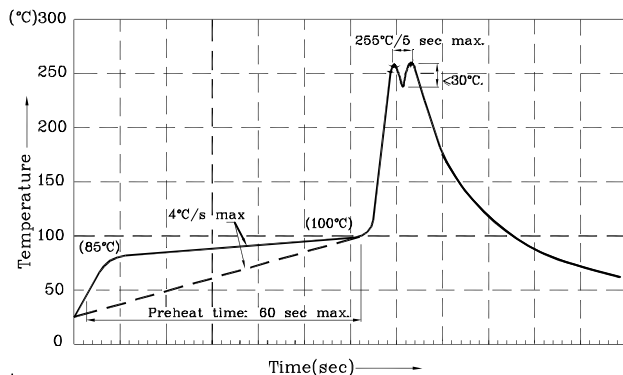
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



❖ 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 260°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.

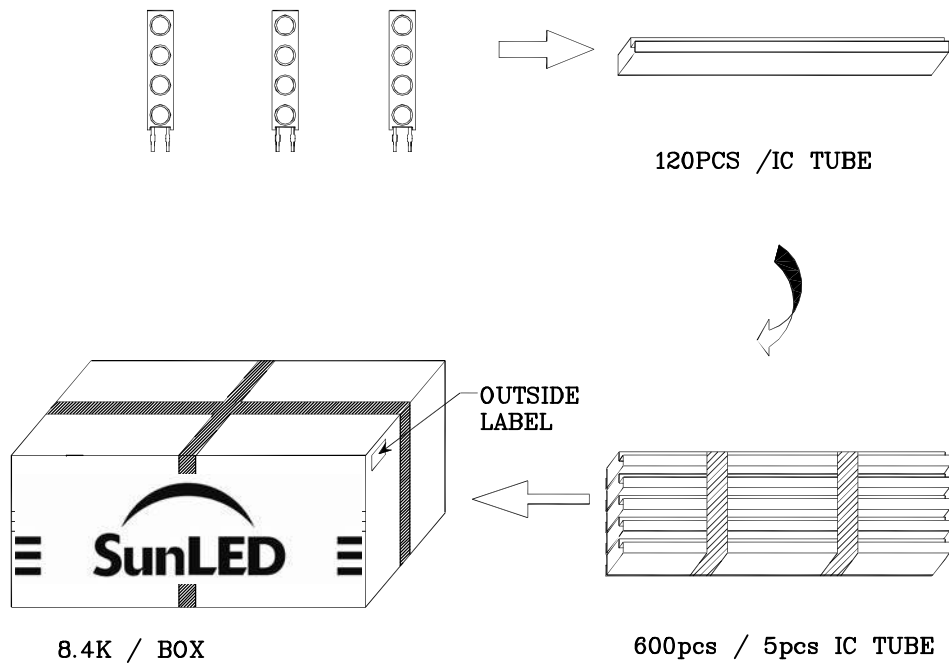
Remarks:



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: $\pm 1\text{nm}$
2. Luminous Intensity / Luminous Flux: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS



| | | |
|---|--|-------------------------------------|
|  | | Q.C. Q C XX XX XXXX PASSED |
| P/NO : XWA4Lxxx147x | | |
| QTY : 600 pcs | | CODE: XXX |
| S/N : XX | | |
| LOT NO:  XXXXXXXXXXXXXXXXXXXXXXXX | | |
| RoHS Compliant | | |

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