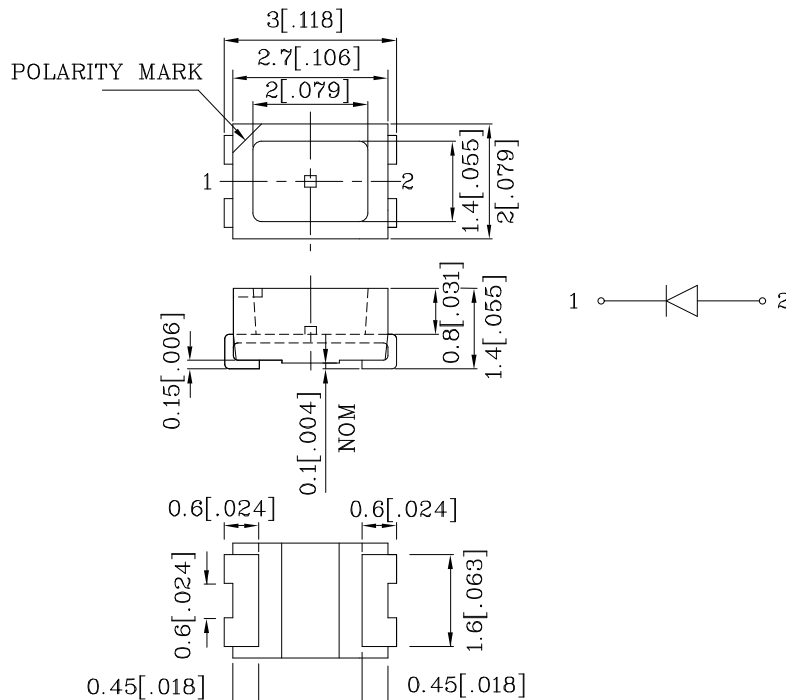


- 3.0MM X 2.0MM, 1.4MM HIGH, ONLY MINIMUM SPACE REQUIRED.
- SUITABLE FOR COMPACT OPTOELECTRONIC APPLICATIONS.
- LOW POWER CONSUMPTION.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



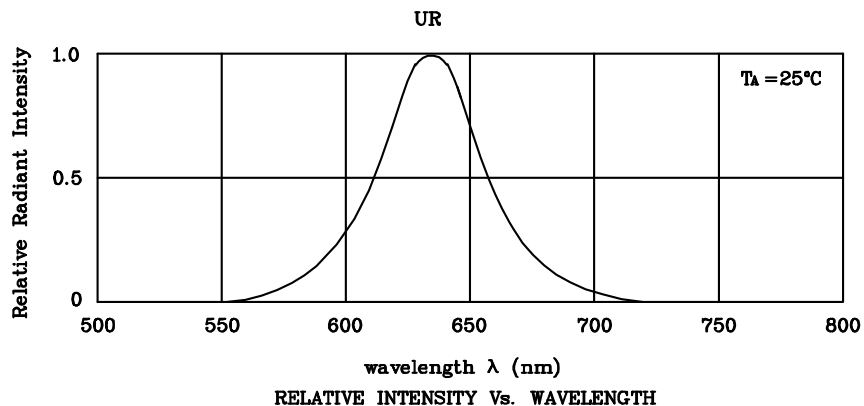
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. Specifications are subject to change without notice.



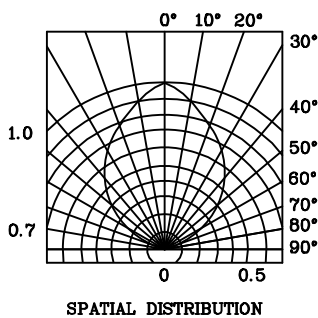
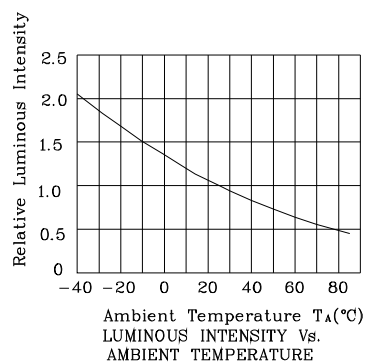
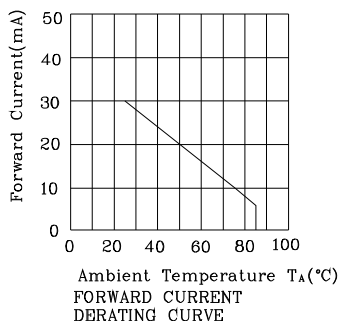
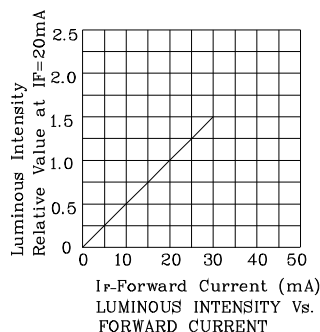
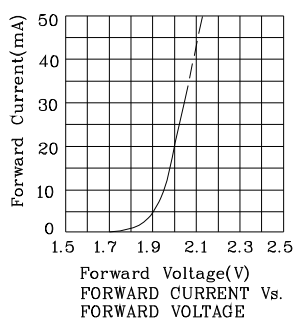
| Absolute Maximum Ratings<br>(TA=25°C)                          |      | UR<br>(GaAsP/GaP) | Unit |
|----------------------------------------------------------------|------|-------------------|------|
| Reverse Voltage                                                | VR   | 5                 | V    |
| Forward Current                                                | IF   | 30                | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | iFS  | 160               | mA   |
| Power Dissipation                                              | PT   | 75                | mW   |
| Operating Temperature                                          | TA   | -40 ~ +85 °C      |      |
| Storage Temperature                                            | Tstg | -40 ~ +85         |      |

| Operating Characteristics<br>(T <sub>A</sub> =25°C)                          |                | UR<br>(GaAsP/GaP) | Unit |
|------------------------------------------------------------------------------|----------------|-------------------|------|
| Forward Voltage (Typ.)<br>(I <sub>F</sub> =20mA)                             | V <sub>F</sub> | 2.0               | V    |
| Forward Voltage (Max.)<br>(I <sub>F</sub> =20mA)                             | 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> =20mA)              | λ P            | 627               | nm   |
| Wavelength of Dominant<br>Emission (Typ.)<br>(I <sub>F</sub> =20mA)          | λ D            | 625               | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(I <sub>F</sub> =20mA) | Δλ             | 45                | nm   |
| Capacitance (Typ.)<br>(V <sub>F</sub> =0V, f=1MHz)                           | C              | 15                | pF   |

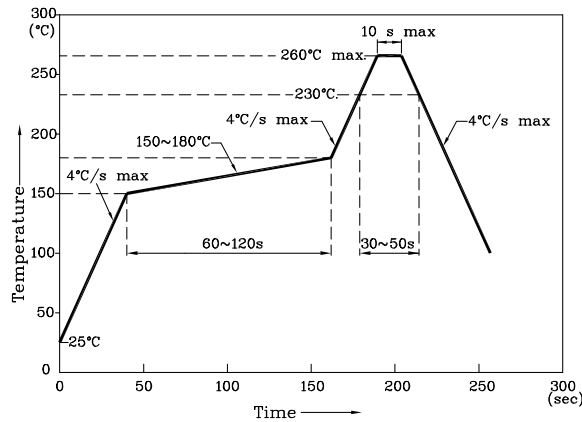
| Part Number                   | Emitting Color | Emitting Material     | Lens-color  | Luminous Intensity (IF=20mA)<br>mcd |                   | Wavelength<br>nm<br>λ P | Viewing Angle<br>2 θ 1/2 |
|-------------------------------|----------------|-----------------------|-------------|-------------------------------------|-------------------|-------------------------|--------------------------|
|                               |                |                       |             | min.                                | typ.              |                         |                          |
| ZUR50FW                       | Red            | GaAsP/GaP             | Water Clear | 7                                   | 19                | 627                     | 90°                      |
|                               |                |                       |             |                                     |                   |                         |                          |
|                               |                |                       |             |                                     |                   |                         |                          |
| Published Date : FEB 26, 2008 |                | Drawing No : SDSA6337 |             | V1                                  | Checked : B.L.LIU |                         | P.1/4                    |



❖ **UR**



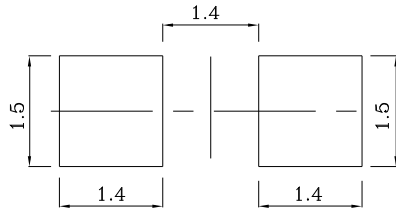
Reflow Soldering Profile For Lead-free SMT Process.



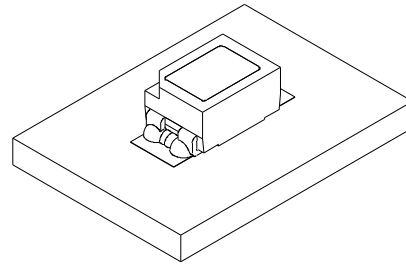
NOTES:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

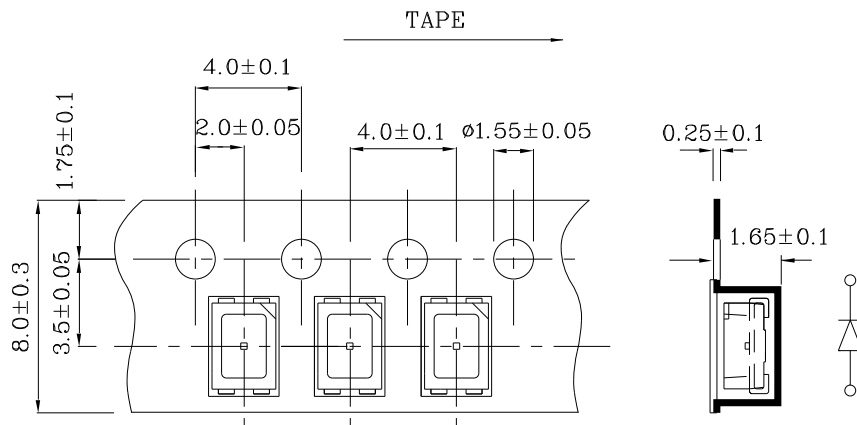
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance:± 0.1)



❖ The device has a single mounting surface. The device must be mounted according to the specifications.



❖ Tape Specification (Units : mm)



Remarks:

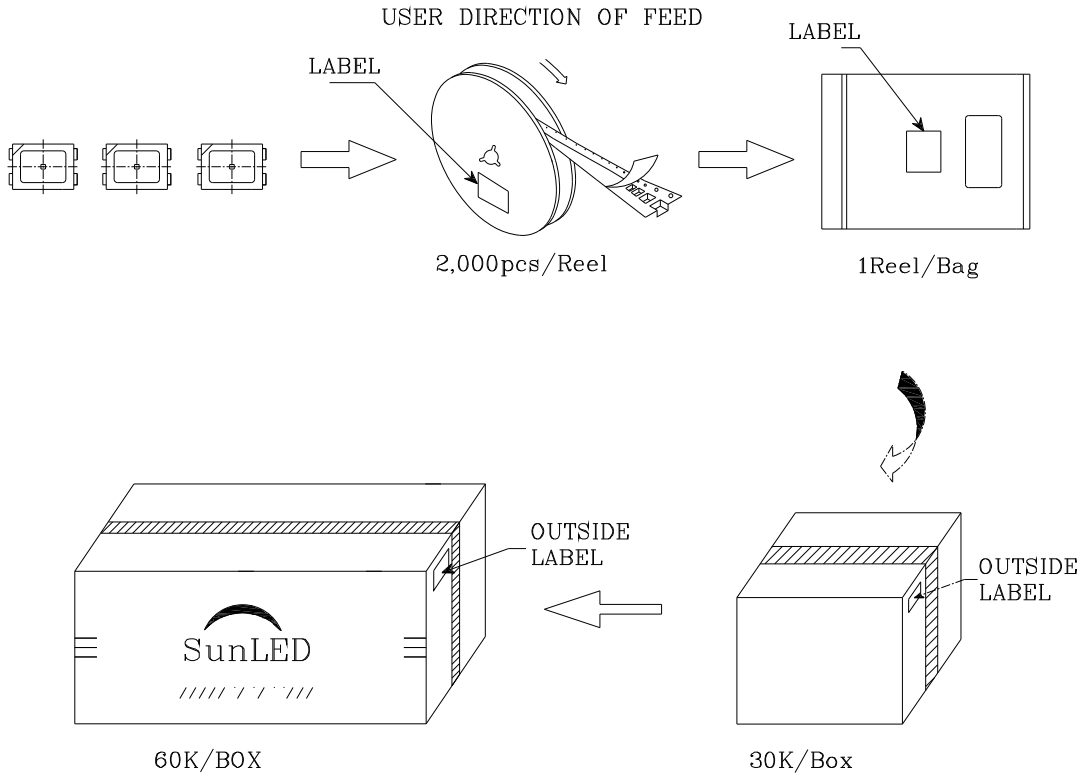
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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**

**ZUR50FW**



**SunLED**

Q.C. Q C  
XX XX XXXX  
PASSED

|                          |           |
|--------------------------|-----------|
| P/NO : Zxx50Fx           |           |
| QTY : 2,000 pcs          | CODE: XXX |
| S/N : XX                 |           |
| LOT NO:                  |           |
| <br>XXXXXXXXXXXXXXXXXXXX |           |
| RoHS Compliant           |           |