

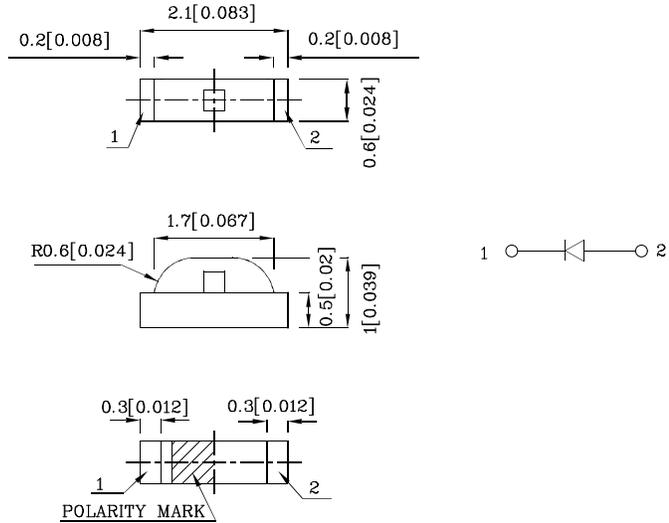
**Features**

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

**Package Schematics**



**Notes:**

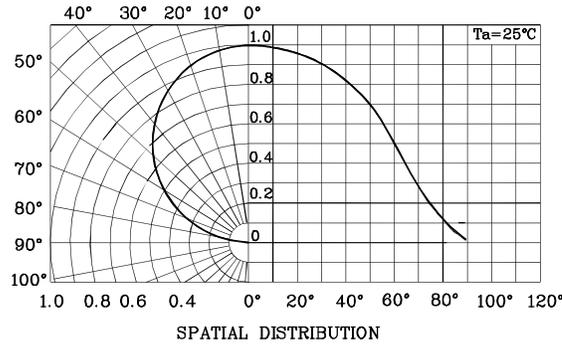
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004")$  unless otherwise noted.
3. Specifications are subject to change without notice.

| Absolute Maximum Ratings<br>(TA=25°C)                          |                  | FWS<br>(InGaN) | Unit |
|--|------------------|----------------|------|
| Reverse Voltage  | V <sub>R</sub>   | 5              | V    |
| Forward Current  | I <sub>F</sub>   | 30             | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | i <sub>FS</sub>  | 100            | mA   |
| Power Dissipation  | P <sub>D</sub>   | 120            | mW   |
| Operating Temperature  | T <sub>A</sub>   | -40 ~ +85      | °C   |
| Storage Temperature  | T <sub>stg</sub> | -40 ~ +85      |      |
| Electrostatic Discharge Threshold<br>(HBM)                     |                  | 250            | V    |

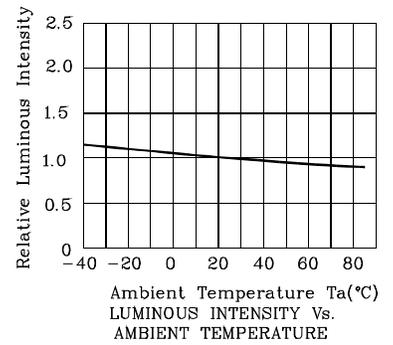
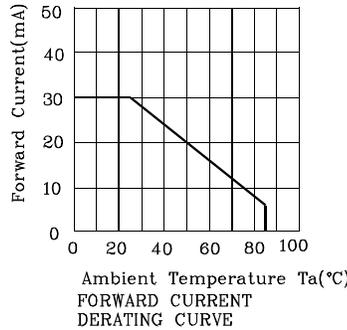
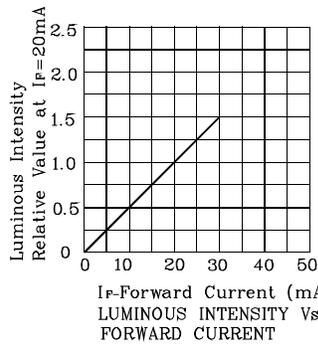
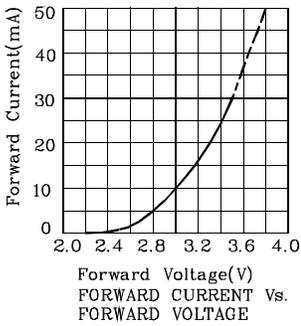
| Operating Characteristics<br>(TA=25°C)             |                | FWS<br>(InGaN) | Unit |
|--|----------------|----------------|------|
| Forward Voltage (Typ.)<br>(I <sub>F</sub> =20mA)   | V <sub>F</sub> | 3.3            | V    |
| Forward Voltage (Max.)<br>(I <sub>F</sub> =20mA)   | V <sub>F</sub> | 4              | V    |
| Reverse Current (Max.)<br>(V <sub>R</sub> =5V)     | I <sub>R</sub> | 50             | uA   |
| Chromaticity Coordinates<br>(Typ.)                 | x              | 0.31           |      |
|  | y              | 0.31           |      |
| Capacitance (Typ.)<br>(V <sub>F</sub> =0V, f=1MHz) | C              | 100            | pF   |

| Part Number | Emitting Color | Emitting Material | Lens-color         | Luminous Intensity<br>CIE127-2007*<br>(I <sub>F</sub> =20mA)<br>mcd |      | Viewing Angle<br>2θ 1/2 |
|-------------|----------------|-------------------|--------------------|---|------|-------------------------|
|             |                |                   |                    | min.  | typ. |                         |
| XZFWS74F    | White          | InGaN             | Yellow Fluorescent | 300*  | 447* | 120°                    |

\*Luminous intensity value is in accordance with CIE127-2007 standards.

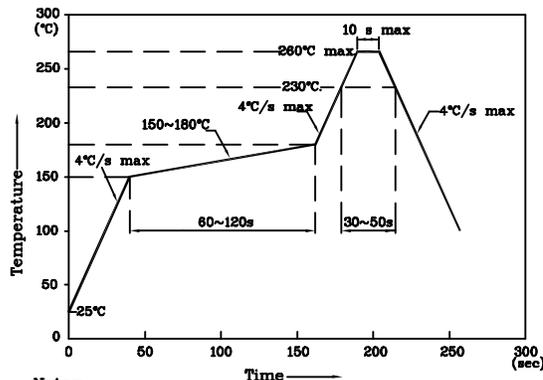


❖ FWS



**LED is recommended for reflow soldering and soldering profile is shown below.**

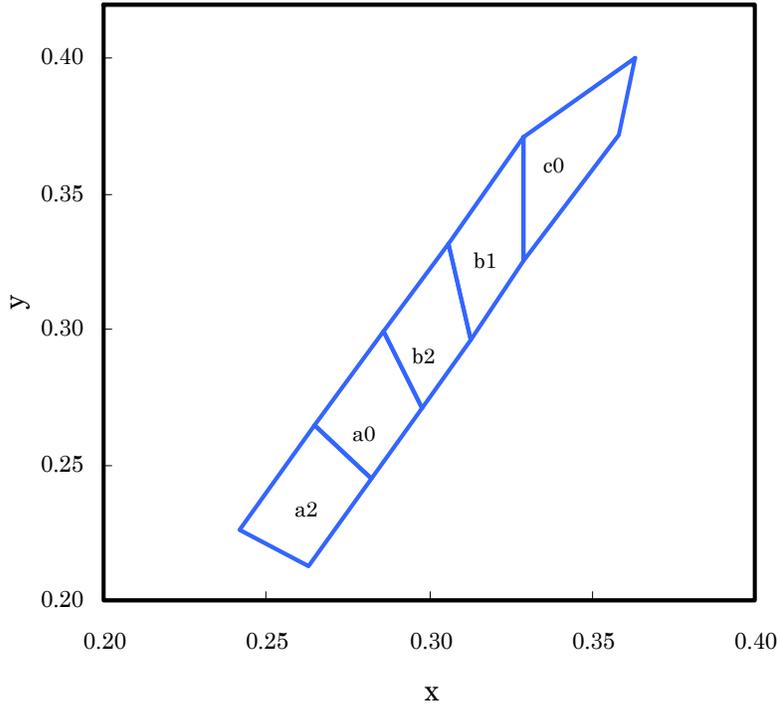
**Reflow Soldering Profile for SMD Products (Pb-Free Components)**



- 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

XZFWS74F

White CIE

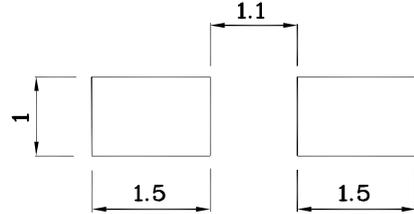
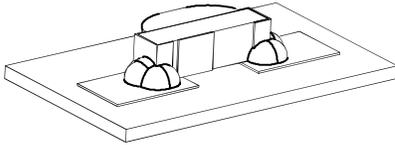


|    | x     | y     |    | x     | y     |    | x     | y     |
|----|-------|-------|----|-------|-------|----|-------|-------|
| a2 | 0.263 | 0.213 | a0 | 0.282 | 0.245 | b2 | 0.298 | 0.271 |
|    | 0.282 | 0.245 |    | 0.298 | 0.271 |    | 0.313 | 0.296 |
|    | 0.265 | 0.265 |    | 0.286 | 0.299 |    | 0.306 | 0.332 |
|    | 0.242 | 0.226 |    | 0.265 | 0.265 |    | 0.286 | 0.299 |
| b1 | 0.313 | 0.296 | c0 | 0.329 | 0.325 |    |       |       |
|    | 0.329 | 0.325 |    | 0.358 | 0.372 |    |       |       |
|    | 0.329 | 0.371 |    | 0.363 | 0.400 |    |       |       |
|    | 0.306 | 0.332 |    | 0.329 | 0.371 |    |       |       |

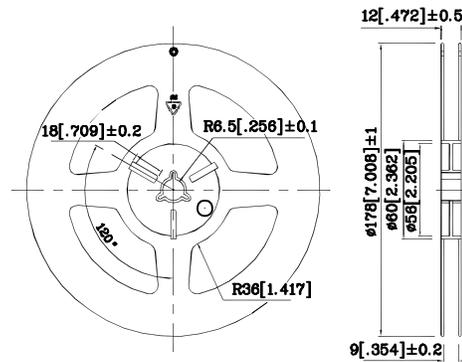
Notes:  
Shipment may contain more than one chromaticity regions.  
Orders for single chromaticity region are generally not accepted.  
Measurement tolerance of the chromaticity coordinates is  $\pm 0.01$ .

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

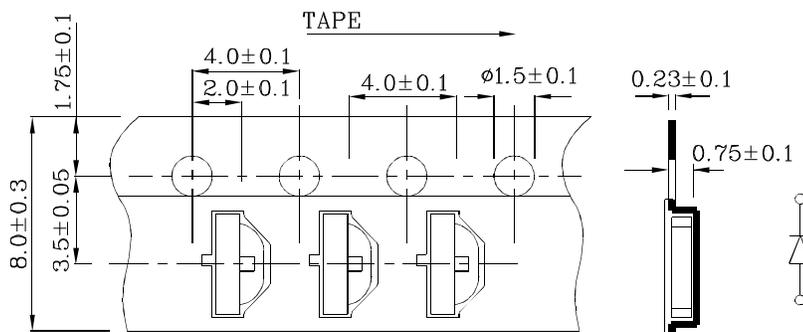
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance:  $\pm 0.1$ )



❖ Reel Dimension



❖ Tape Specification (Units : mm)



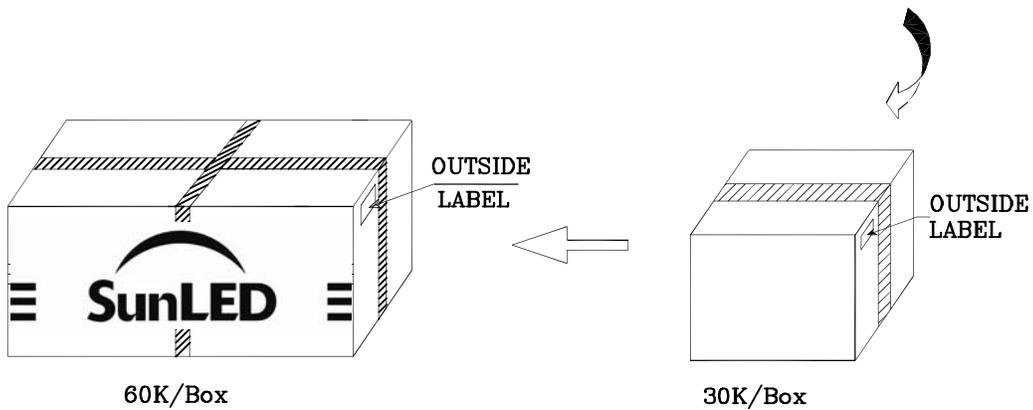
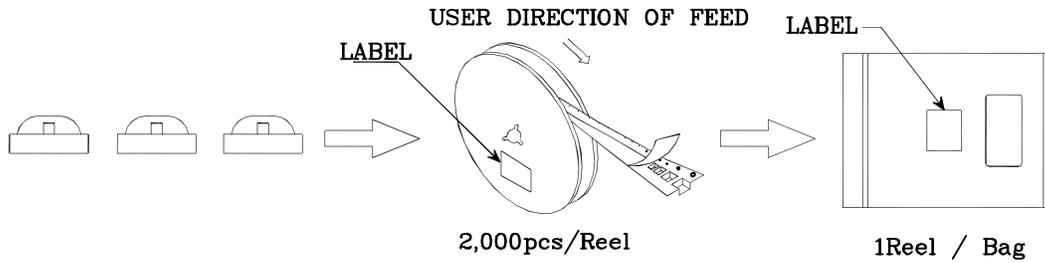
Remarks:

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

1. Measurement tolerance of the chromaticity coordinates is  $\pm 0.01$ .
2. Luminous Intensity/ Luminous Flux:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1V$

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**



|   |  |  |      |     |            |        |
|---|--|--|------|-----|------------|--------|
|                            |  | <table border="1"> <tr> <td>Q.C.</td> </tr> <tr> <td style="text-align: center;">Q C</td> </tr> <tr> <td style="text-align: center;">XX XX XXXX</td> </tr> <tr> <td style="text-align: center;">PASSED</td> </tr> </table> | Q.C. | Q C | XX XX XXXX | PASSED |
| Q.C.  |  |  |      |     |            |        |
| Q C   |  |  |      |     |            |        |
| XX XX XXXX  |  |  |      |     |            |        |
| PASSED  |  |  |      |     |            |        |
| P/NO : XZxxx74x   |  |  |      |     |            |        |
| QTY : 2,000 pcs   |  | CODE: XXX  |      |     |            |        |
| S/N : XX  |  |  |      |     |            |        |
| LOT NO:   |  |  |      |     |            |        |
| <br>XXXXXXXXXXXXXXXXXXXXX |  |  |      |     |            |        |
| RoHS Compliant  |  |  |      |     |            |        |

**TERMS OF USE**

1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
2. Contents within this document are subject to improvement and enhancement changes without notice.
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