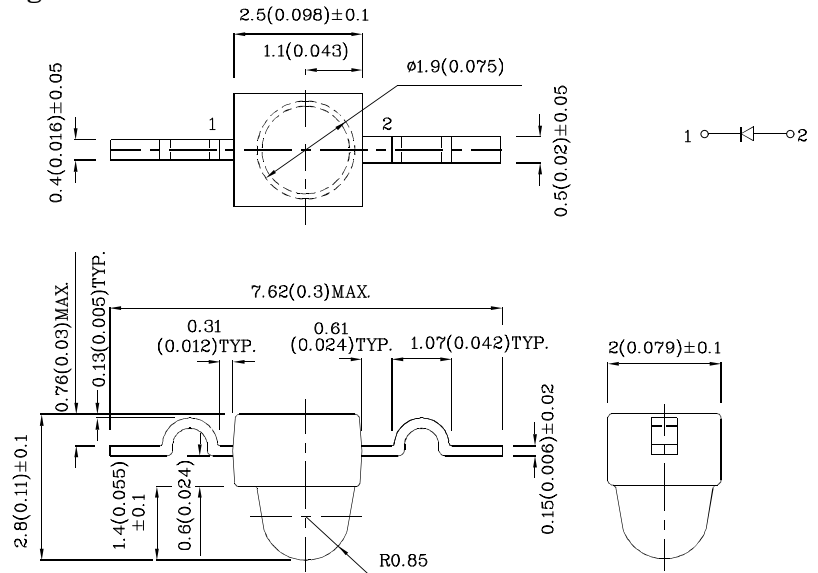


### Features

- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- Moisture sensitivity level : level 3
- Package : 1000pcs / reel
- RoHS compliant



### Package Schematics



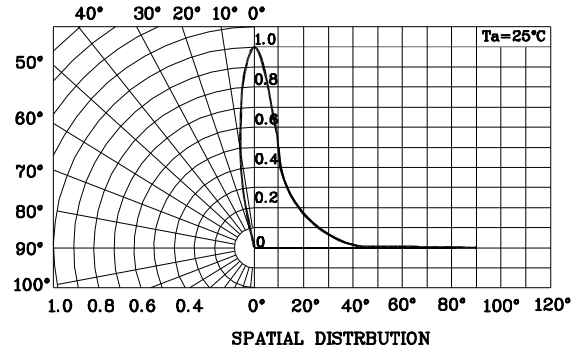
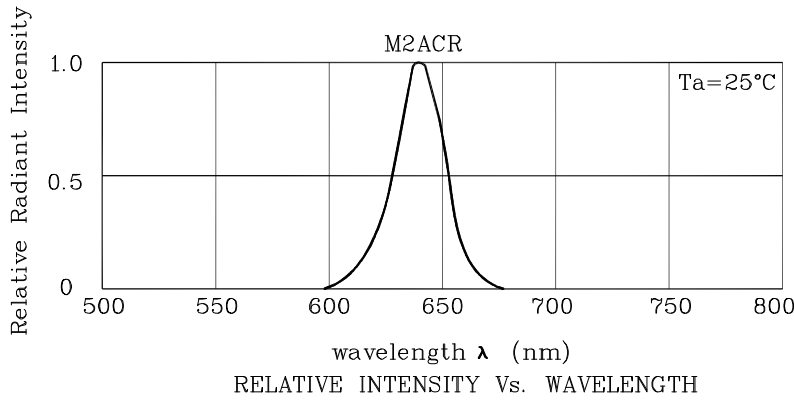
#### Notes:

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.

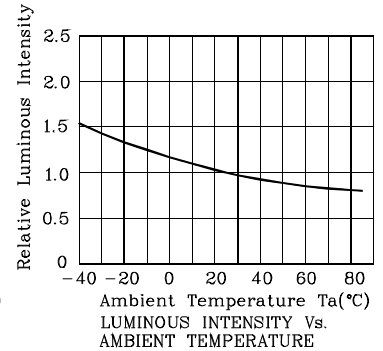
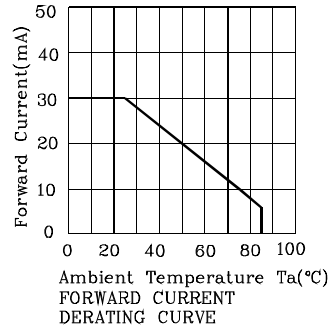
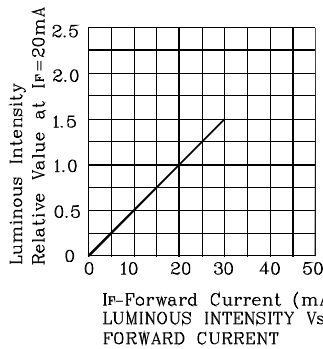
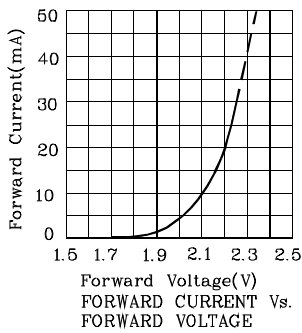
| Absolute Maximum Ratings<br>(T <sub>A</sub> =25°C)             |                  | M2ACR<br>(AlGaInP) | Unit |
|--|------------------|--------------------|------|
| Reverse Voltage  | V <sub>R</sub>   | 5                  | V    |
| Forward Current  | I <sub>F</sub>   | 30                 | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | i <sub>FS</sub>  | 150                | mA   |
| Power Dissipation  | P <sub>D</sub>   | 84                 | mW   |
| Operating Temperature  | T <sub>A</sub>   | -40 ~ +85          | °C   |
| Storage Temperature  | T <sub>stg</sub> | -40 ~ +85          |      |

| Operating Characteristics<br>(T <sub>A</sub> =25°C)                          |                | M2ACR<br>(AlGaInP) | Unit |
|--|----------------|--------------------|------|
| Forward Voltage (Typ.)<br>(I <sub>F</sub> =20mA)                             | V <sub>F</sub> | 2.2                | V    |
| Forward Voltage (Max.)<br>(I <sub>F</sub> =20mA)                             | V <sub>F</sub> | 2.8                | 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 <sub>P</sub> | 640                | nm   |
| Wavelength of Dominant<br>Emission (Typ.)<br>(I <sub>F</sub> =20mA)          | λ <sub>D</sub> | 625                | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(I <sub>F</sub> =20mA) | Δλ             | 25                 | nm   |
| Capacitance (Typ.)<br>(V <sub>F</sub> =0V, f=1MHz)                           | C              | 27                 | pF   |

| Part Number  | Emitting Color | Emitting Material | Lens-color  | Luminous Intensity<br>(I <sub>F</sub> =20mA)<br>mcd |       | Wavelength<br>nm<br>λ <sub>P</sub> | Viewing Angle<br>2θ 1/2 |
|--------------|----------------|-------------------|-------------|---|-------|------------------------------------|-------------------------|
|              |                |                   |             | min.  | typ.  |                                    |                         |
| XZM2ACR46W-8 | Red            | AlGaInP           | Water Clear | 8000  | 10990 | 640                                | 20°                     |



❖ M2ACR



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

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

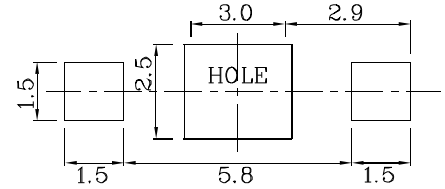
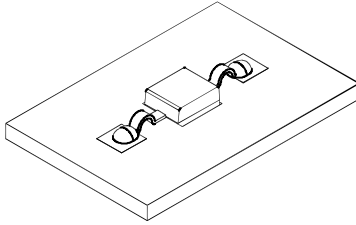


- Notes:
1. Maximum soldering temperature should not exceed 280°C
  2. Recommended reflow temperature: 145°C~280°C
  3. Do not put stress to the epoxy resin during high temperatures conditions

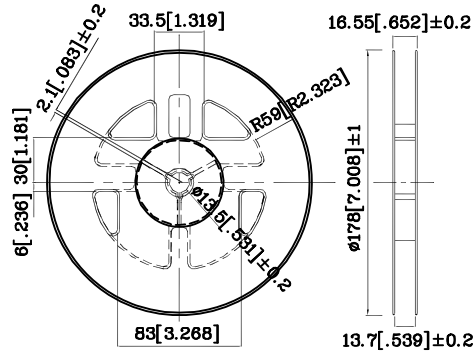


❖ The device has a single mounting surface.  
The device must be mounted according to the specifications.

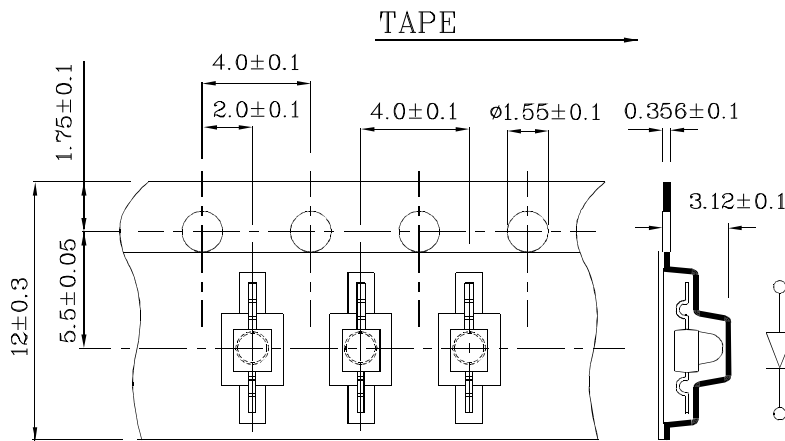
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance:  $\pm 0.1$ )



❖ Reel Dimension



❖ Tape Specification (Units : mm)



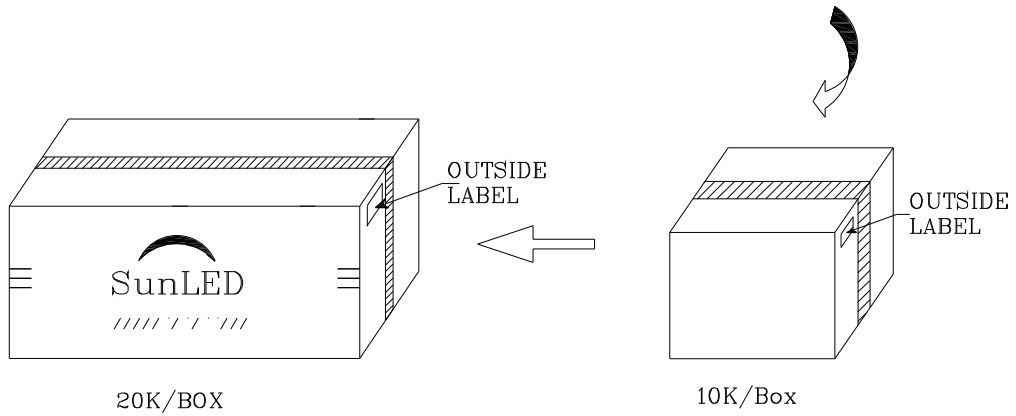
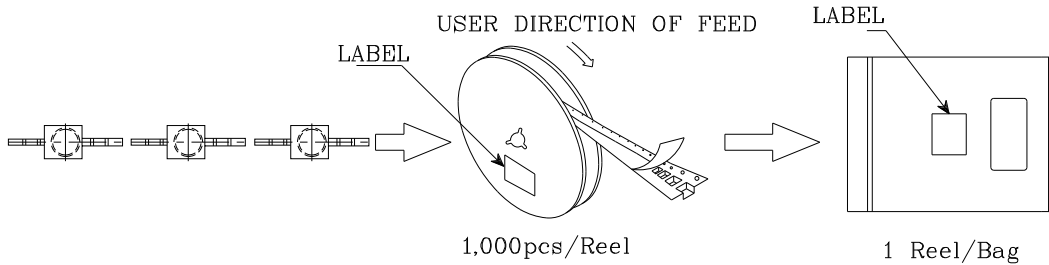

Remarks:

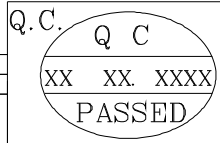

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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**

|  |           |
|--|-----------|
|                                  |           |
| P/NO : XZxxx46x-8  |           |
| QTY : 1,000 pcs  | CODE: XXX |
| S/N : XX   |           |
| LOT NO :   |           |
| <br>XXXXXXXXXXXXXXXXXXXXXXXXXXXX |           |
| RoHS Compliant   |           |