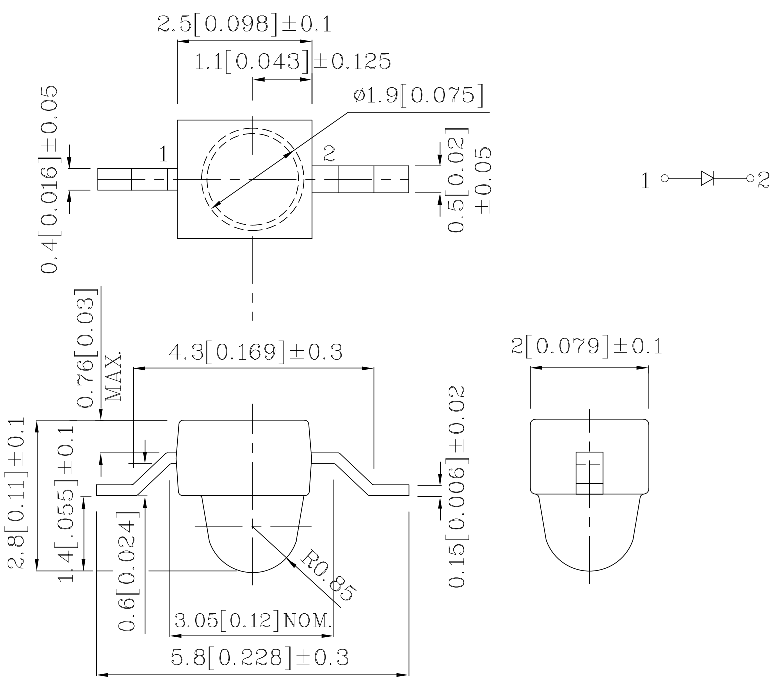
www.SunLEDusa.com

**Part Number:** **XZMO46W-9**

SUBMINIATURE SOLID STATE LAMP

## Features

- SUBMINIATURE PACKAGE.
- WIDE VIEWING ANGLE.
- Z-BEND LEAD.
- LONG LIFE-SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.
- PACKAGE : 1000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

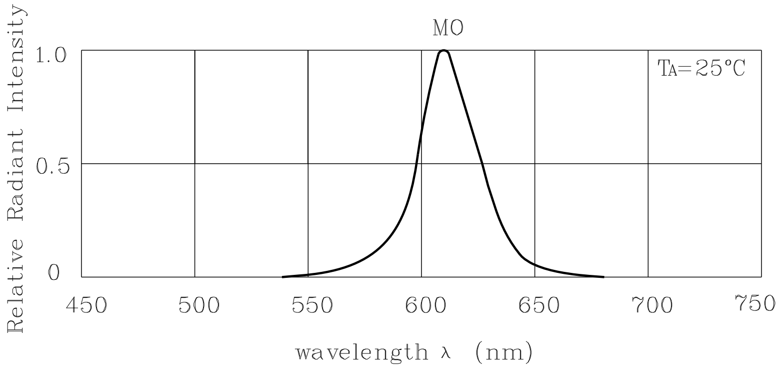


Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25(0.01") unless otherwise noted.
3.Specifications are subject to change without notice.

| **Absolute Maximum Ratings ($T_A$=25°C)** | | **MO (InGaAlP)** | **Unit** |
|---|---|---|---|
| Reverse Voltage | $V_R$ | 5 | V |
| Forward Current | $I_F$ | 30 | mA |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | $i_{FS}$ | 195 | mA |
| Power Dissipation | $P_T$ | 75 | mW |
| Operating Temperature | $T_A$ | -40 ~ +85 | °C |
| Storage Temperature | Tstg | -40 ~ +85 | |

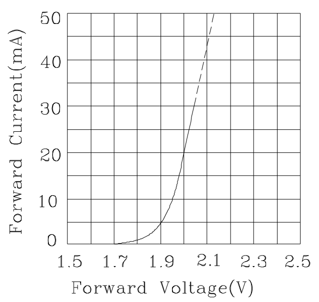
| **Operating Characteristics ($T_A$=25°C)** | | **MO (InGaAlP)** | **Unit** |
|---|---|---|---|
| Forward Voltage (Typ.) ($I_F$=20mA) | $V_F$ | 2.0 | V |
| Forward Voltage (Max.) ($I_F$=20mA) | $V_F$ | 2.5 | V |
| Reverse Current (Max.) ($V_R$=5V) | $I_R$ | 10 | uA |
| Wavelength Of Peak Emission (Typ.) ($I_F$=20mA) | λ P | 610 | nm |
| Wavelength Of Dominant Emission (Typ.) ($I_F$=20mA) | λ D | 601 | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) ($I_F$=20mA) | Δλ | 29 | nm |
| Capacitance (Typ.) (VF=0V, f=1MHz) | C | 30 | pF |

| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity (IF=20mA) mcd | | Wavelength nm λ P | Viewing Angle 2θ 1/2 |
|---|---|---|---|---|---|---|---|
| | | | | min. | typ. | | |
| XZMO46W-9 | Orange | InGaAlP | Water Clear | 1200 | 1990 | 610 | 20° |

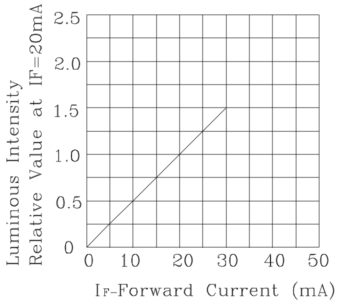


RELATIVE INTENSITY Vs. WAVELENGTH

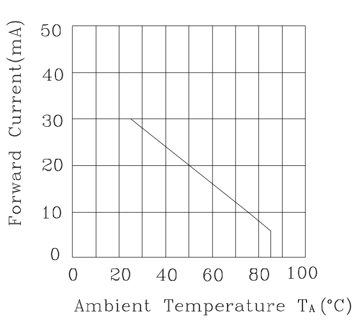
## ❖ MO



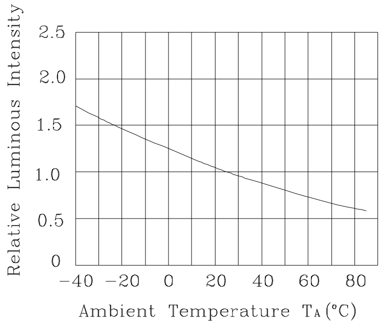
FORWARD CURRENT Vs.
FORWARD VOLTAGE



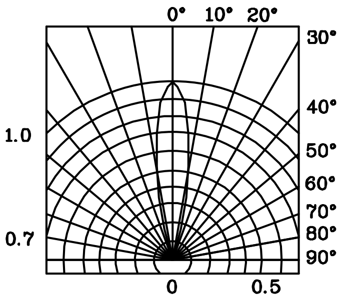
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE

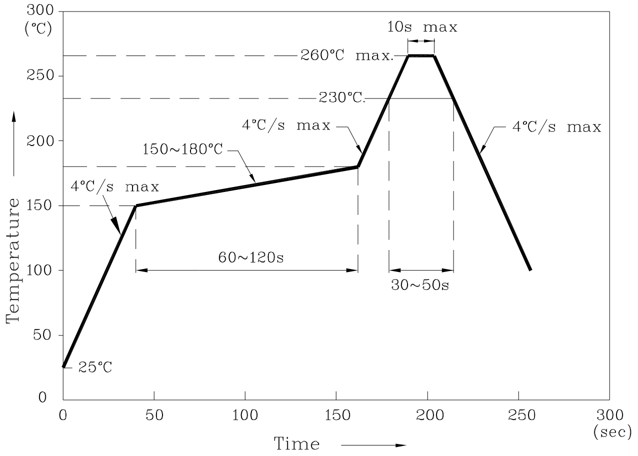


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



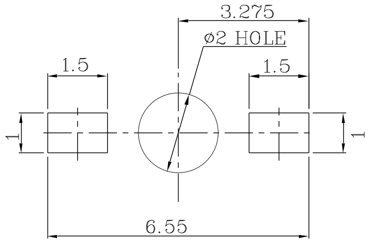
SPATIAL DISTRIBUTION

Reflow Soldering Profile For Lead-free SMT Process.

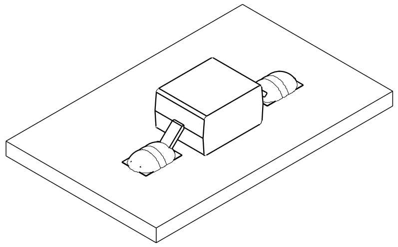


Notes:
1. Maximum soldering temperature should not exceed 260℃.
2. Recommended reflow temperature: 145℃-260℃.
3. Do not put stress to the epoxy resin during high temperatures conditions.

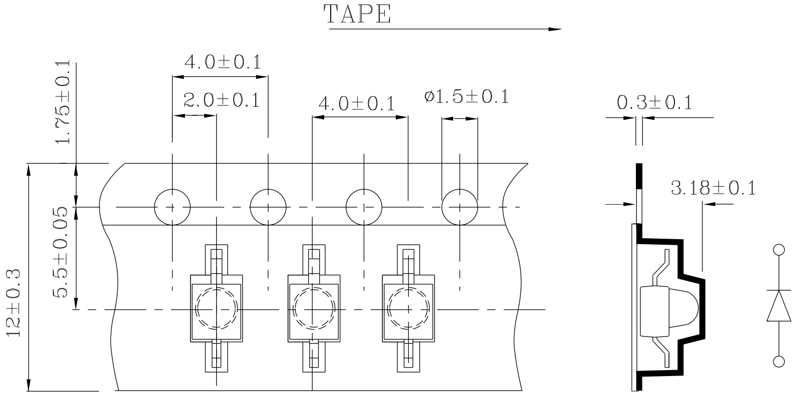
- ❖ **Recommended Soldering Pattern (Units : mm;Tolerance:± 0.1)**



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



- ❖ **Tape Specification (Units : mm)**



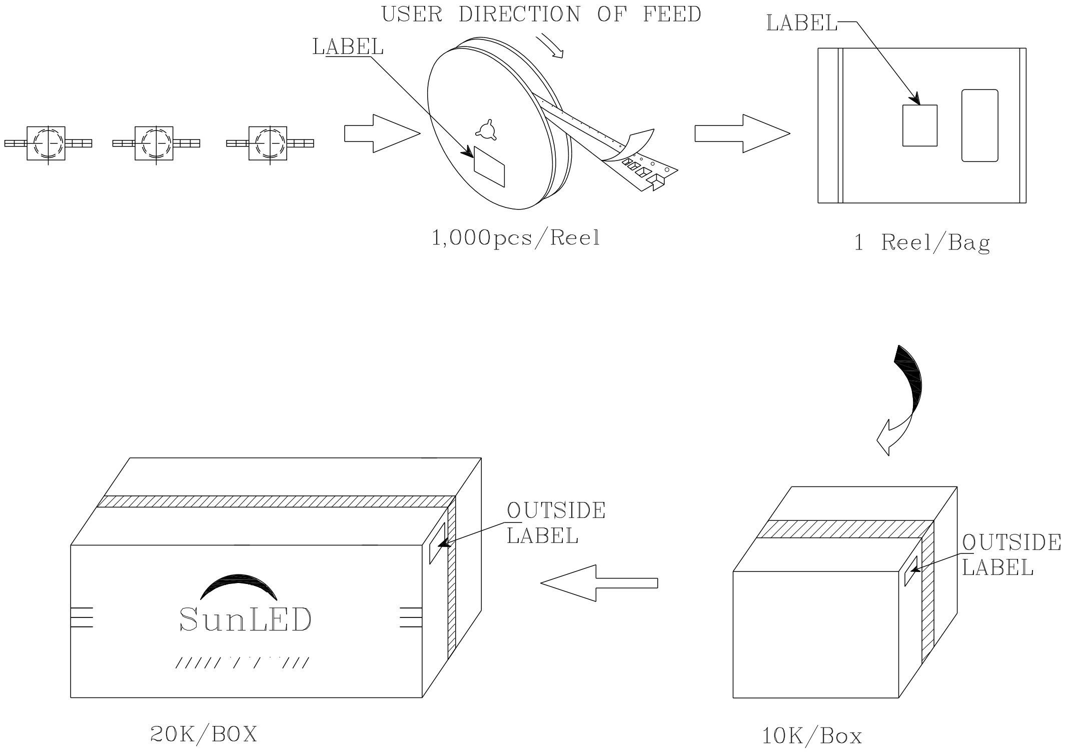
Remarks:

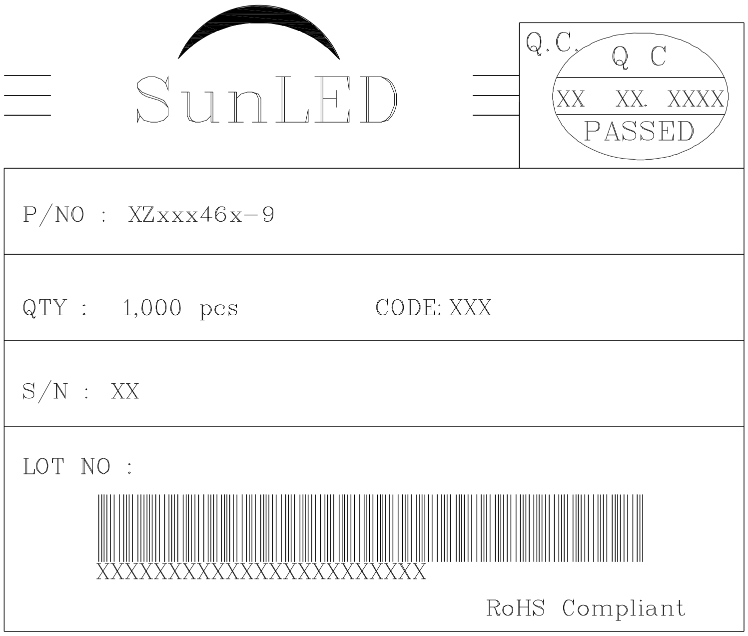
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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 XZMO46W-9





SunLED

Q.C.
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PASSED

P/NO : XZxxx46x-9

QTY : 1,000 pcs CODE: XXX

S/N : XX

LOT NO :

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RoHS Compliant