

PRELIMINARY SPEC

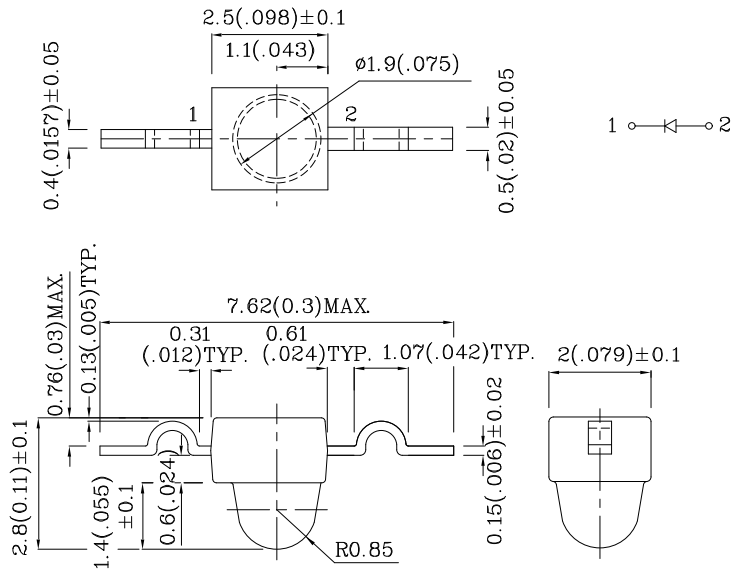
Features

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



Notes:

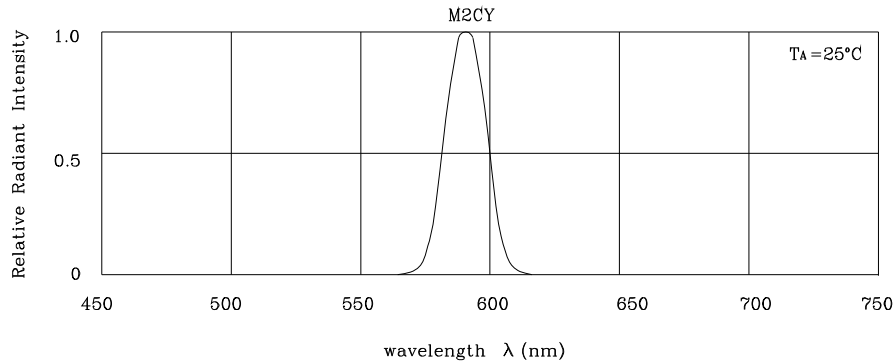
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ " unless otherwise noted.
3. Specifications are subject to change without notice.



| Absolute Maximum Ratings (TA=25°C) | | M2CY (AlInGaP) | Unit |
|--|------|-------------------|------|
| Reverse Voltage | VR | 5 | V |
| Forward Current | IF | 30 | mA |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | iFS | 140 | mA |
| Power Dissipation | PT | 84 | mW |
| Operating Temperature | TA | -40 ~ +85 | °C |
| Storage Temperature | Tstg | -40 ~ +85 | |

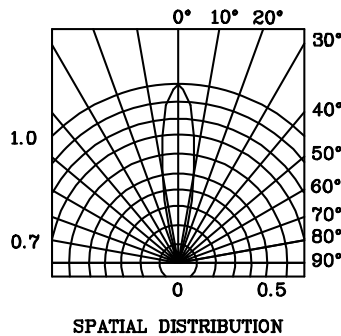
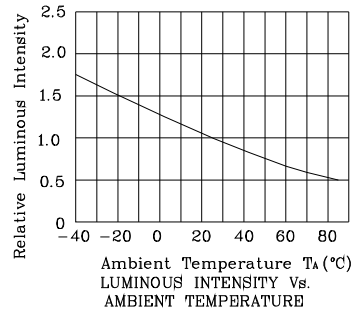
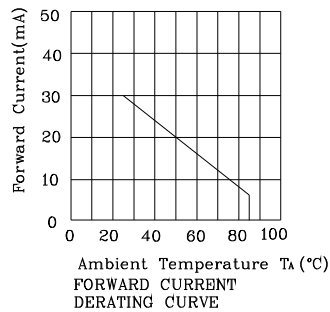
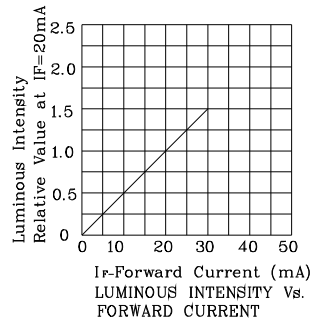
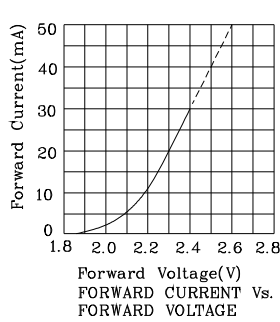
| Operating Characteristics (TA=25°C) | | M2CY (AlInGaP) | Unit |
|---|-----------------|-------------------|------|
| Forward Voltage (Typ.) (IF=20mA) | VF | 2.3 | V |
| Forward Voltage (Max.) (IF=20mA) | VF | 2.8 | V |
| Reverse Current (Max.) (VR=5V) | IR | 10 | uA |
| Wavelength Of Peak Emission (Typ.) (IF=20mA) | λ P | 590 | nm |
| Wavelength Of Dominant Emission (Typ.) (IF=20mA) | λ D | 589 | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA) | $\Delta\lambda$ | 20 | nm |
| Capacitance (Typ.) (VF=0V, f=1MHz) | C | 45 | pF |

| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity (IF=20mA) mcd | | Wavelength nm λ P | Viewing Angle 2 θ 1/2 |
|---|----------------|-------------------|-------------|--|------|---------------------------------|---------------------------------|
| | | | | min. | typ. | | |
| ZM2CY46W-8 | Yellow | AlInGaP | Water Clear | 1200 | 2990 | 590 | 20° |
| Published Date : FEB 27,2008 Drawing No : SDSA6184 V1 Checked : B.L.LIU P.1/4 | | | | | | | |

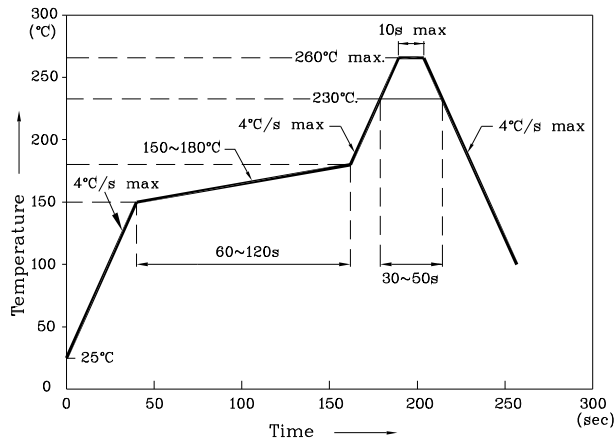


RELATIVE INTENSITY Vs. WAVELENGTH

❖ **M2CY**



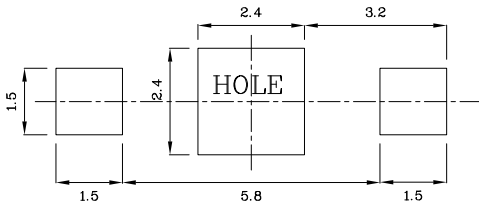
Reflow Soldering Profile For Lead-free SMT Process.



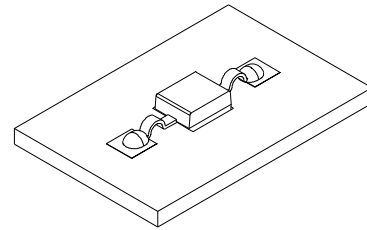
Notes:

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.

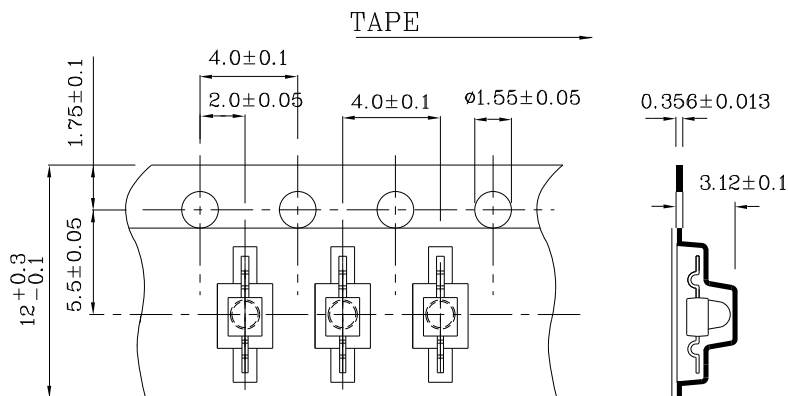
❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

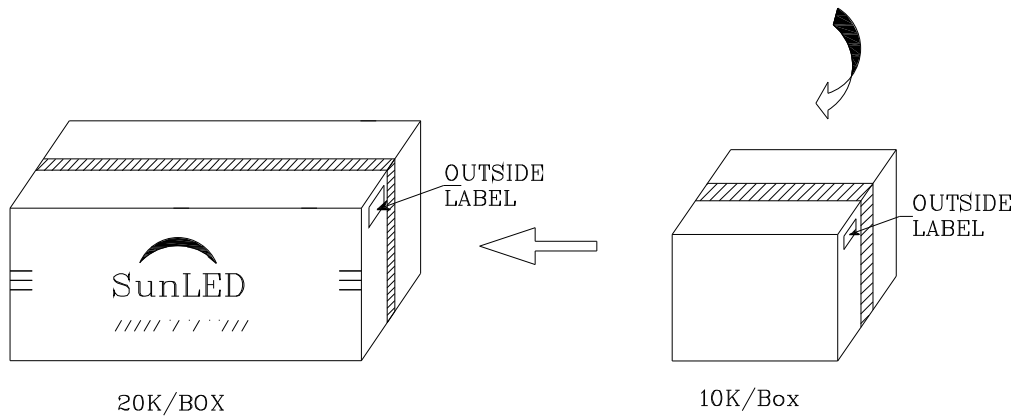
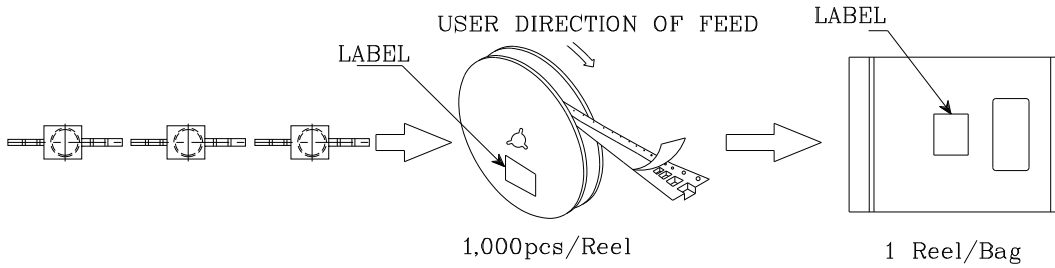
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:


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

ZM2CY46W-8



| | |
|--|-----------|
| P/N0 : Zxxx46x-8 | |
| QTY : 1,000 pcs | CODE: XXX |
| S/N : XX | |
| LOT NO : | |
|  XXXXXXXXXXXXXXXXXXXXXXXXXX | |
| RoHS Compliant | |