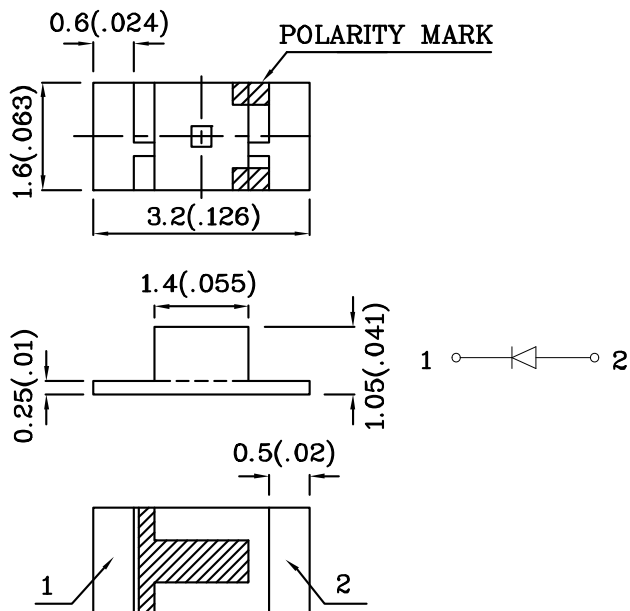


## Features

- 

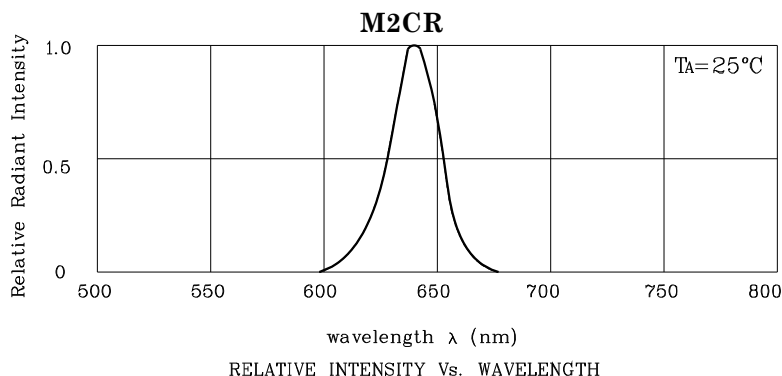
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.
3. Specifications are subject to change without notice.



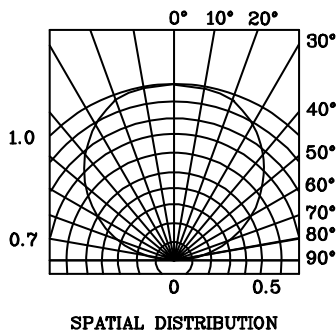
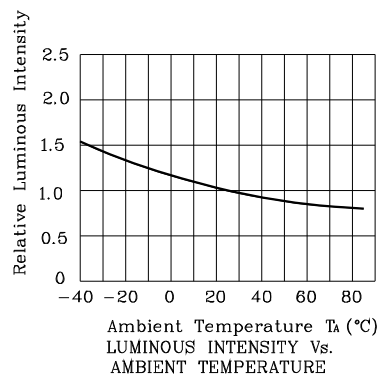
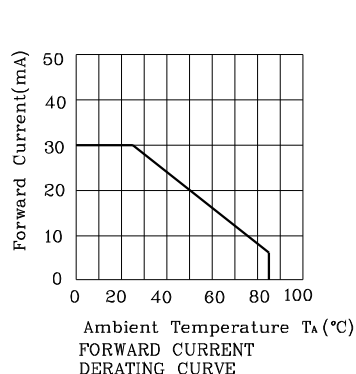
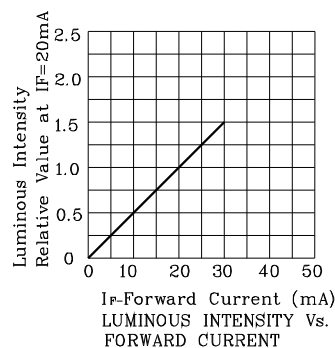
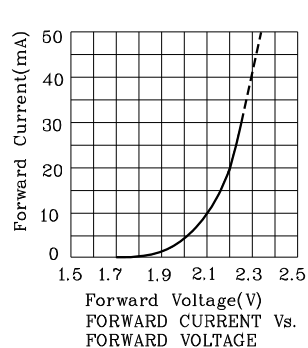
| Absolute Maximum Ratings<br>(TA=25°C)                          |      | M2CR<br>(AlInGaP) | Unit |
|----------------------------------------------------------------|------|-------------------|------|
| Reverse Voltage                                                | VR   | 5                 | V    |
| Forward Current                                                | IF   | 30                | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | iFS  | 150               | mA   |
| Power Dissipation                                              | PT   | 84                | mW   |
| Operating Temperature                                          | TA   | -40 ~ +85         | °C   |
| Storage Temperature                                            | Tstg | -40 ~ +85         |      |

| Operating Characteristics<br>(TA=25°C)                          |                | M2CR<br>(AlInGaP) | Unit |
|-----------------------------------------------------------------|----------------|-------------------|------|
| Forward Voltage (Typ.)<br>(IF=20mA)                             | V <sub>F</sub> | 2.2               | V    |
| Forward Voltage (Max.)<br>(IF=20mA)                             | V <sub>F</sub> | 2.8               | V    |
| Reverse Current (Max.)<br>(V <sub>R</sub> =5V)                  | I <sub>R</sub> | 10                | μA   |
| Wavelength of Peak<br>Emission (Typ.)<br>(IF=20mA)              | λ P            | 640               | nm   |
| Wavelength of Dominant<br>Emission (Typ.)<br>(IF=20mA)          | λ D            | 630               | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(IF=20mA) | Δλ             | 25                | nm   |
| Capacitance (Typ.)<br>(V <sub>F</sub> =0V, f=1MHz)              | C              | 27                | pF   |

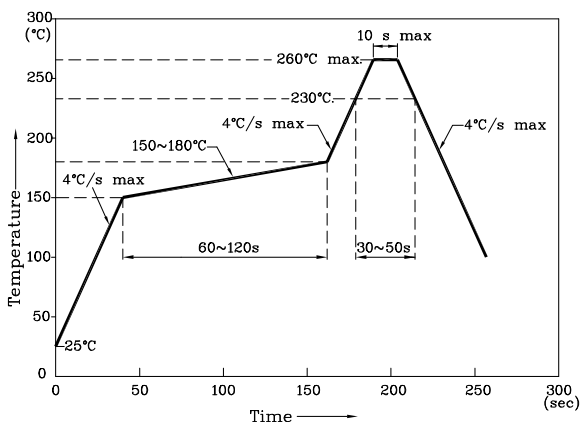
| Part Number                   | Emitting Color | Emitting Material     | Lens-color  | Luminous Intensity (IF=20mA)<br>mcd | Wavelength<br>nm<br>λ P | Viewing Angle<br>2 θ 1/2 |
|-------------------------------|----------------|-----------------------|-------------|-------------------------------------|-------------------------|--------------------------|
|                               |                |                       |             | min.                                | typ.                    |                          |
| ZM2CR55W-2                    | Red            | AlInGaP               | Water Clear | 650                                 | 995                     | 640 120°                 |
|                               |                |                       |             |                                     |                         |                          |
|                               |                |                       |             |                                     |                         |                          |
| Published Date : FEB 23, 2008 |                | Drawing No : SDSA6220 |             | V1                                  | Checked : B.L.LIU       | P.1/4                    |



❖ **M2CR**



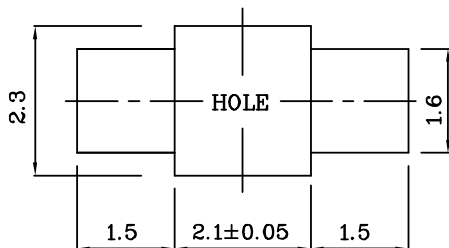
Reflow Soldering Profile For Lead-free SMT Process.



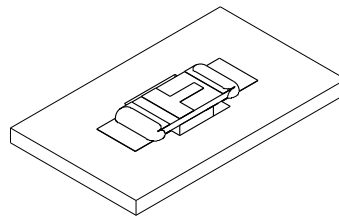
NOTES:

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)

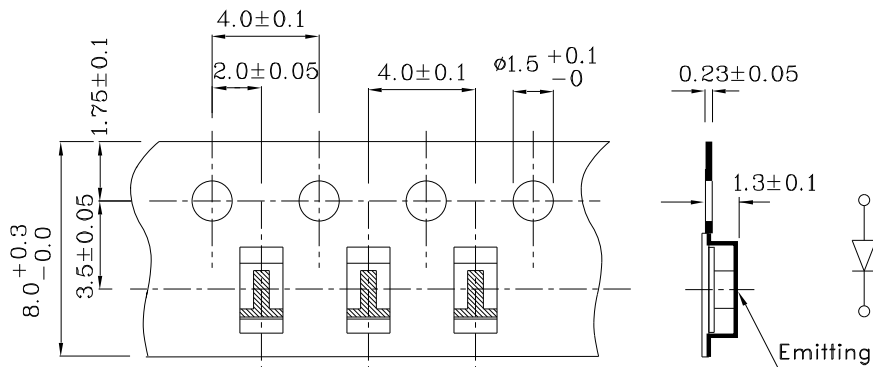


❖ The device has a single mounting surface. The device must be mounted according to the specifications.



❖ Tape Specification (Units : mm)

TAPE



Remarks:

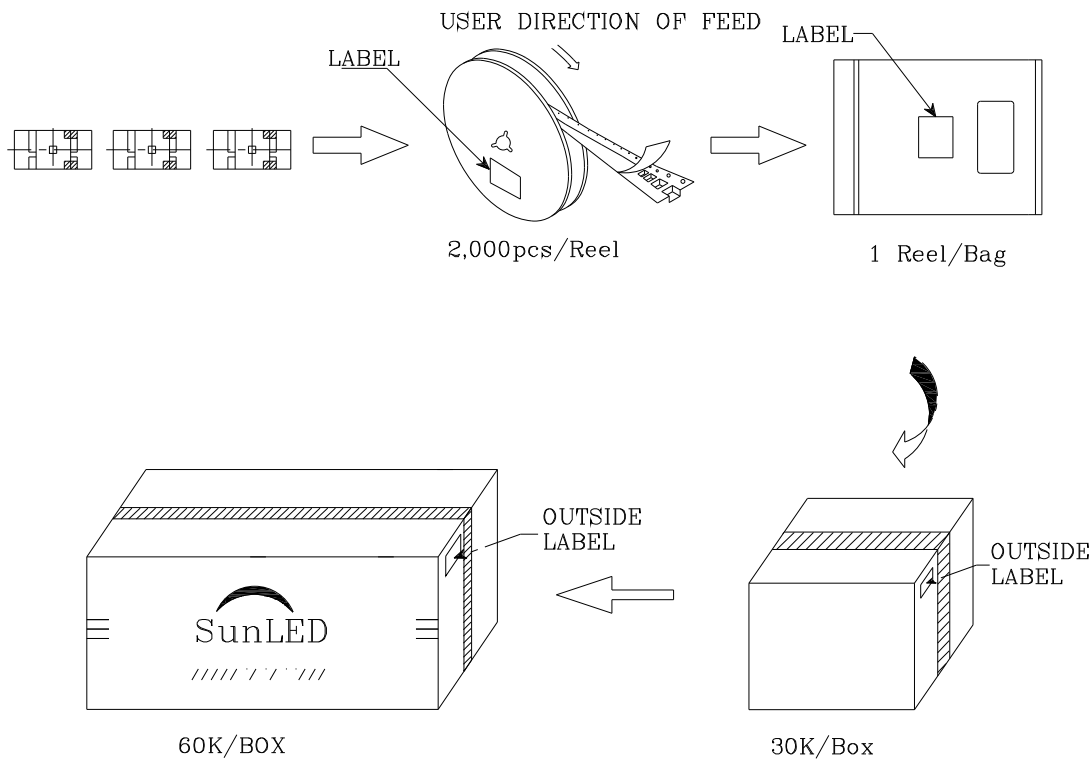
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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

## ZM2CR55W-2





Q.C. Q C

XX XX XXXX

PASSED

|                                                                                                               |           |
|---------------------------------------------------------------------------------------------------------------|-----------|
| P/NO : Zxxx55x-2                                                                                              |           |
| QTY : 2,000 pcs                                                                                               | CODE: XXX |
| S/N : XX                                                                                                      |           |
| LOT NO :                                                                                                      |           |
| <br>XXXXXXXXXXXXXXXXXXXXX |           |
| RoHS Compliant                                                                                                |           |