

Part Number: ZM2CRK67S

4.0x4.0mm RIGHT ANGLE SURFACE MOUNT LED

LAMP

Features

• Ideal for indication light on hand held products

• Long life and robust package

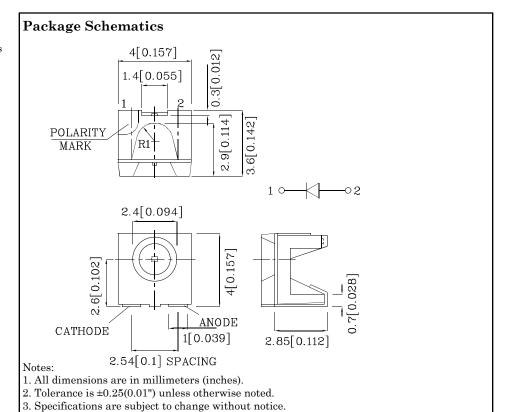
• Standard Package: 500pcs/ Reel

 \bullet MSL (Moisture Sensitivity Level): 3

• RoHS compliant







| Absolute Maximum Ratings (T _A =25°C) | M2CRK (AlGaInP) | Unit | | |
|--|--------------------|-----------|----|--|
| Reverse Voltage | $V_{\rm R}$ | 5 | V | |
| Forward Current | I_{F} | 30 | mA | |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | i _{FS} | 150 | mA | |
| Power Dissipation | P_D | 84 | mW | |
| Operating Temperature | $T_{\rm A}$ | -40 ~ +85 | °C | |
| Storage Temperature | Tstg | -40 ~ +85 | 30 | |

| Operating Characteristics (T _A =25°C) | M2CRK (AlGaInP) | Unit | | |
|--|---------------------|------|----|--|
| Forward Voltage (Typ.) (I _F =20mA) | V_{F} | 2.2 | V | |
| Forward Voltage (Max.) (I _F =20mA) | V_{F} | 2.8 | V | |
| Reverse Current (Max.) $(V_R=5V)$ | I_R | 10 | uA | |
| Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA) | λΡ | 640* | nm | |
| Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA) | λD | 625* | nm | |
| Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA) | $\triangle \lambda$ | 20 | nm | |
| Capacitance (Typ.) (V _F =0V, f=1MHz) | С | 27 | pF | |

| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity CIE127-2007* $(I_F=20 \mathrm{mA})$ mcd | | Wavelength CIE127-2007* nm λP | Viewing Angle 20 1/2 |
|----------------|-------------------|----------------------|-------------|--|--------------|--|----------------------------|
| | | | | min. | typ. | | |
| ZM2CRK67S | Red | AlGaInP | Water Clear | 1300 400* | 1790 577* | 640* | 120° |

^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Feb 24,2014

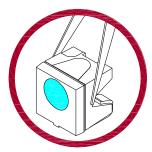
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Handling Precautions

Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force.

As a result, special handling precautions need to be observed during assembly using silicone encapsulated LED products. Failure to comply might lead to damage and premature failure of the LED.

1. Handle the component along the side surfaces by using forceps or appropriate tools.



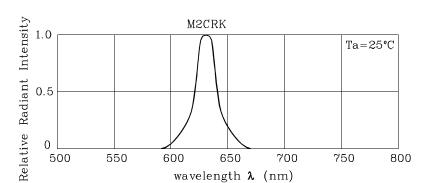
2. Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry.

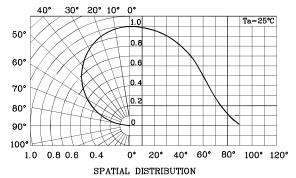




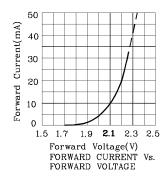
3. As silicone encapsulation is permeable to gases, some corrosive substances such as H_2S might corrode silver plating of leadframe. Special care should be taken if an LED with silicone encapsulation is to be used near such substances.

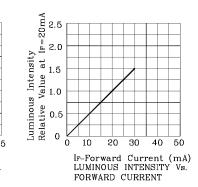
LAMP



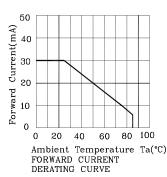


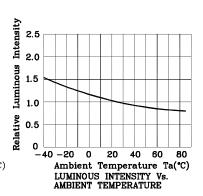
❖ M2CRK





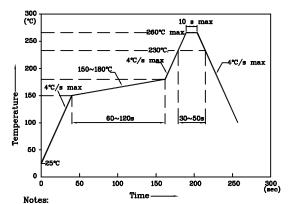
RELATIVE INTENSITY Vs. CIE WAVELENGTH





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

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



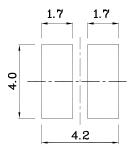
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

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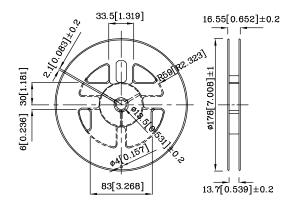
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



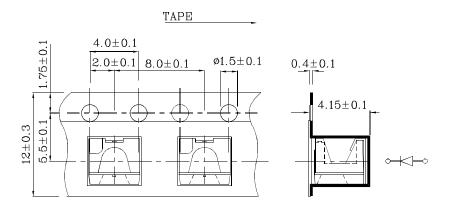
❖ Recommended Soldering Pattern (Units:mm; Tolerance: ± 0.1)



❖ 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:

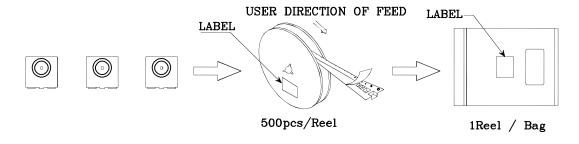
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

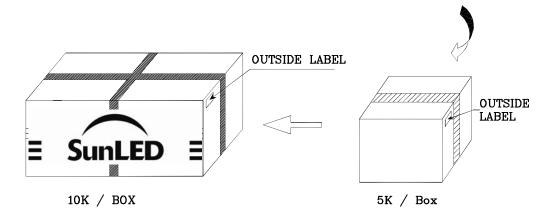
Note: Accuracy may depend on the sorting parameters.

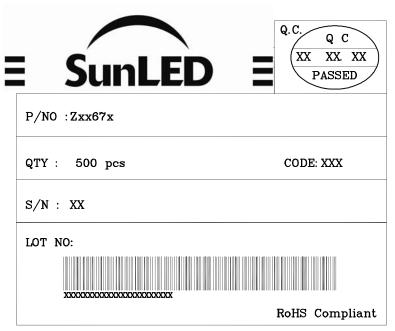
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PACKING & LABEL SPECIFICATIONS







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SDSA9410 V1-X Layout: Maggie L.