

Part Number: XLM2ACR11W T-1 (3mm) SOLID STATE LAMP



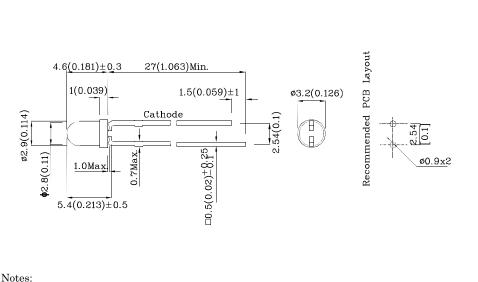
Features

- Radial / Through hole package
- Reliable & robust
- Low power consumption
- Available on tape and reel
- \bullet RoHS Compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



1. All dimensions are in millimeters (inches).

Package Schematics

2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.

3. Specifications are subject to change without notice.

| Absolute Maximum Ratings (T _A =25°C) | | Red (AlGaInP) | Unit | | |
|--|---------------------------|------------------|------|--|--|
| Reverse Voltage | V_{R} | 5 | V | | |
| Forward Current | $I_{\rm F}$ | 30 | mA | | |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | ifs | 150 | mA | | |
| Power Dissipation | \mathbf{P}_{D} | 84 | mW | | |
| Operating Temperature | $T_{\rm A}$ | A -40 ~ +85 | | | |
| Storage Temperature | Tstg | -40 ~ +85 | °C | | |
| Lead Solder Temperature [2mm Below Package Base] | 260°C For 3 Seconds | | | | |
| Lead Solder Temperature [5mm Below Package Base] | 260°C For 5 Seconds | | | | |

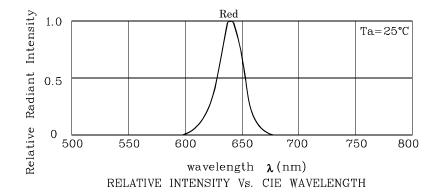
A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

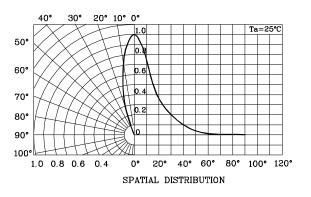
| Operating Characteristics (T _A =25°C) | | Red (AlGaInP) | Unit |
|--|-------------------|------------------|------|
| Forward Voltage (Typ.) (I _F =20mA) | $V_{\rm F}$ | 2.2 | V |
| Forward Voltage (Max.) (I _F =20mA) | V_{F} | 2.8 | V |
| Reverse Current (Max.) $(V_R=5V)$ | I_R | 10 | uA |
| Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA) | λP | 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) | $	riangle\lambda$ | 25 | 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 =20mA) mcd | | Wavelength CIE127-2007* nm λP | Viewing Angle 20 1/2 |
|----------------|-------------------|----------------------|-------------|---|---------------|--|----------------------------|
| | | | | min. | typ. | | |
| XLM2ACR11W | Red | AlGaInP | Water Clear | 2300 1300* | 4090 2390* | 640* | 30° |

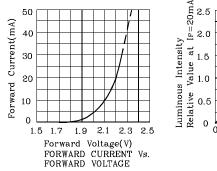
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

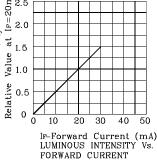


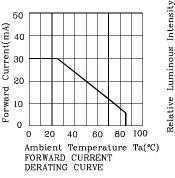


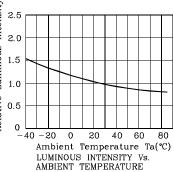


✤ Red

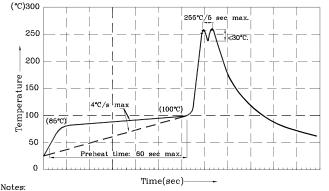








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



I.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260° C 2.Peak wave soldering temperature between 245° C ~ 255° C for 3 sec

2.Peak wave soldering temperature between 245° C ~ 255° C for 3 sec (5 sec max).

3.Do not apply stress to the epoxy resin while the temperature is above 85°C. 4.Fixtures should not incur stress on the component when mounting and during process.

during soldering process. 5.SAC 305 solder alloy is recommended.

6.No more than one wave soldering pass

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength),

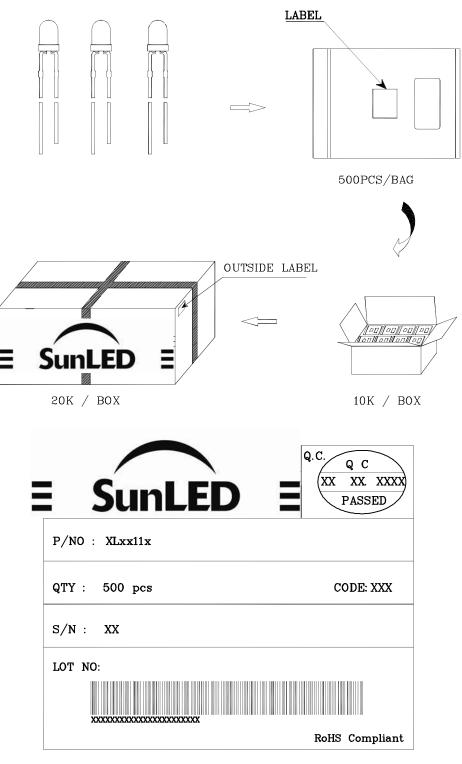
the typical accuracy of the sorting process is as follows:

- 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



TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet.
- User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
- 5. The contents within this document may not be altered without prior consent by SunLED.
- 5. The contents within this document may not be affected without prior consent by SumEE.
- 6. Additional technical notes are available at <u>http://www.SunLEDusa.com/TechnicalNotes.asp</u>

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