

Part Number: XZM2DG78W

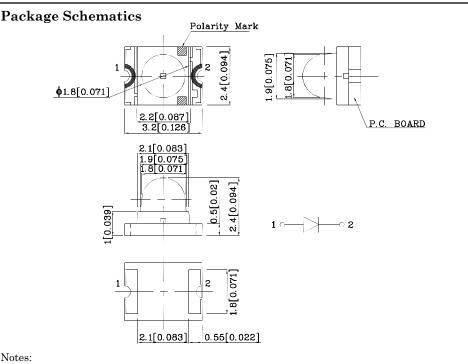
3.2x2.4mm SMD CHIP LED LAMP

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 1,500pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- \bullet RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



1. All dimensions are in millimeters (inches).

2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.

3. Specifications are subject to change without notice.

| Absolute Maximum Ratings (T _A =25°C) | | Green (InGaN) | Unit | |
|--|---------------------------|------------------|------|--|
| Reverse Voltage | V_{R} | 5 | V | |
| Forward Current | $\mathbf{I}_{\mathbf{F}}$ | 30 | mA | |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | ifs | 100 | mA | |
| Power Dissipation | P_{D} | 120 | mW | |
| Operating Temperature | $T_{\rm A}$ | -40 ~ +85 | •C | |
| Storage Temperature | Tstg | $-40 \sim +85$ | | |
| Electrostatic Discharge Threshold (HBM) | 1 | 450 | V | |

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) | | Green (InGaN) | Unit | |
|---|-------------------|------------------|------|--|
| Forward Voltage (Typ.) (I _F =20mA) | V_{F} | 3.2 | V | |
| Forward Voltage (Max.) (I _F =20mA) | V_{F} | 4 | V | |
| Reverse Current (Max.) (V _R =5V) | I_R | 50 | uA | |
| Wavelength of Peak Emission CIE127-2007*(Typ.) (I _F =20mA) | λP | 520* | nm | |
| Wavelength of Dominant Emission CIE127-2007*(Typ.) (I _F =20mA) | λD | 525* | nm | |
| Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA) | $	riangle\lambda$ | 35 | nm | |
| Capacitance (Typ.) (V _F =0V, f=1MHz) | С | 100 | pF | |

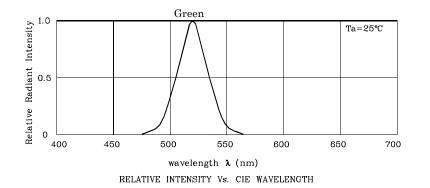
| Part Number | Emitting Color | Emitting Material | Lens-color | CIE127 | s Intensity 7-2007* 0mA) cd | Wavelength CIE127-2007* nm λP | Viewing Angle 20 1/2 |
|----------------|-------------------|----------------------|-------------|--------|--------------------------------------|--|----------------------------|
| | | | | min. | typ. | | |
| XZM2DG78W | Green | InGaN | Water Clear | 3600* | 5990* | 520* | 20° |

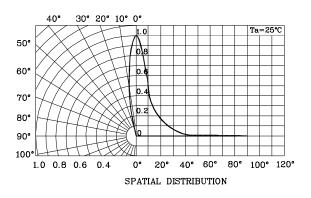
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Sep 19,2016

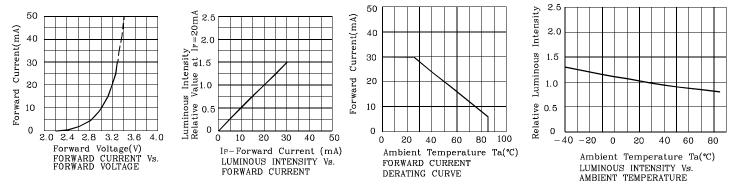
XDSB4259 V5-Z Layout: Maggie L.





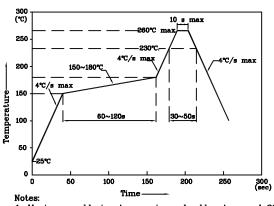


♦ Green



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

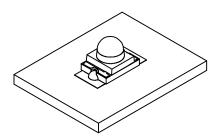
Reflow Soldering Profile for SMD Products (Pb-Free Components)



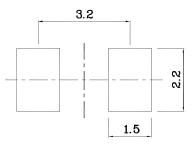
- 1. Maximum soldering temperature should not exceed 260°C 2. Recommended reflow temperature: 145°C-260°C
- 2. Recommended reflow temperature: 145°C-260°C 3. Do not put stress to the epoxy resin during
- high temperatures conditions



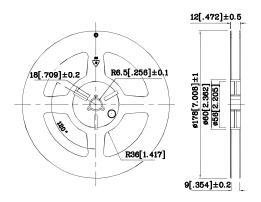
✤ The device has a single mounting surface. The device must be mounted according to the specifications.



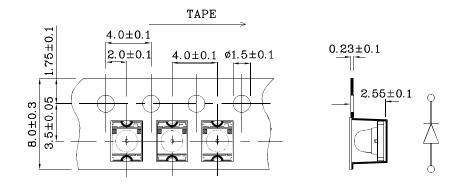
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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%

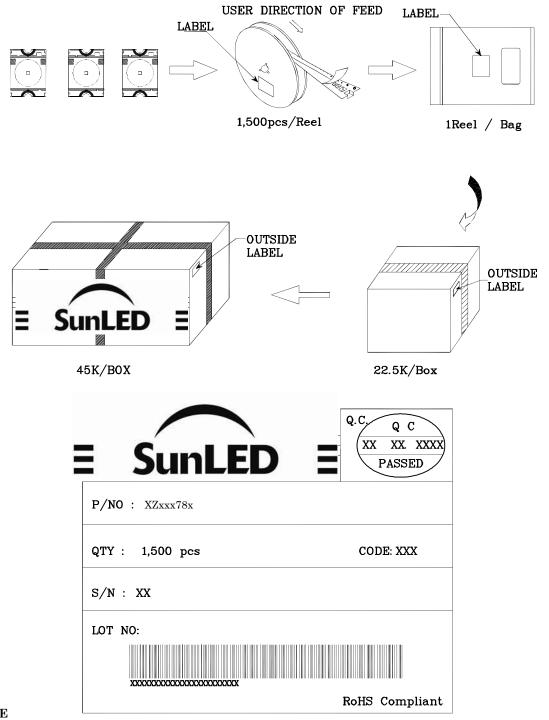
3. Forward Voltage: +/-0.1V $\,$

Note: Accuracy may depend on the sorting parameters.

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PACKING & LABEL SPECIFICATIONS



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.
- $6. Additional technical notes are available at \underline{http://www.SunLEDusa.com/TechnicalNotes.asp} and \underline{http://www.SunLEDusa.com/TechnicalNotes.com/TechnicalNotes.com/TechnicalNotes.com/TechnicalNotes.com/TechnicalNotes.com/TechnicalNotes.com/TechnicalNotes.com/T$