

Part Number: XZM2CRK55W-2

 $3.2 \ge 1.6 \ {\rm mm}$ SMD Chip LED Lamp

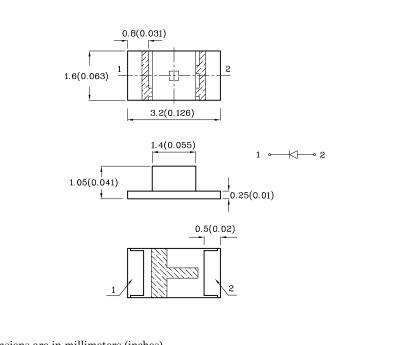
Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- Halogen-free
- RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



1. All dimensions are in millimeters (inches).

Notes:

Package Schematics

2. Tolerance is $\pm 0.2(0.008")$ 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	$i_{\rm FS}$	150	mA	
Power Dissipation	\mathbf{P}_{D}	84	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	°C	

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)	$V_{\rm F}$	2.8	V
Reverse Current (Max.) (V _R =5V)	I_{R}	10	μΑ
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$	20	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	27	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (IF=20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZM2CRK55W-2	Red	AlGaInP	Water Clear	700 200*	1095 347*	640*	140°

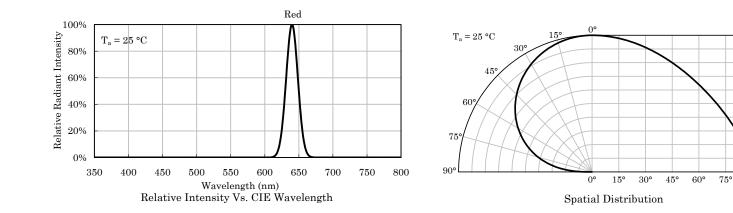
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Mar 02,2023

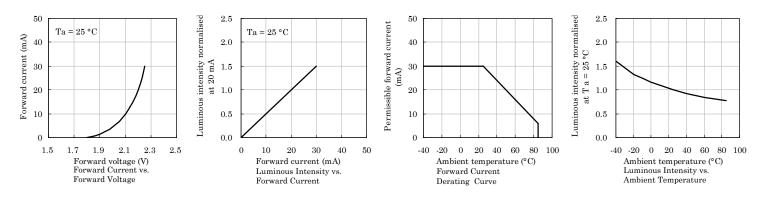
XDSB7780 V7-X Layout: Maggie L.



3.2 x 1.6 mm SMD Chip LED Lamp







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

300 above 255°C (°C) 260°C max. 30s max. 10s max. 250 3°C/s max. 6°C/s max. 200 150 Temperature pre-heating 100 150~200°C above 217°C 60~120s 60~150s 50 -25℃ 0 0 50 100 150 200 250 300 Time (sec) Notes:

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

measured on the package body surface facing up during reflow. 2. Do not apply any stress to the LED during high temperature conditions. 3. Maximum number of soldering passes: 2

1.0

0.5

0.0

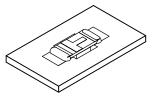
90°

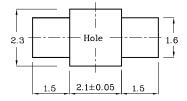
^{1.} All temperatures refer to the center of the package,



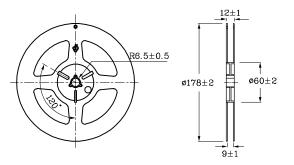
The device has a single mounting surface. The device must be mounted according to the specifications.

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

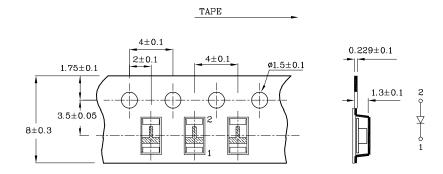




Reel Dimension (Units : mm)



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%

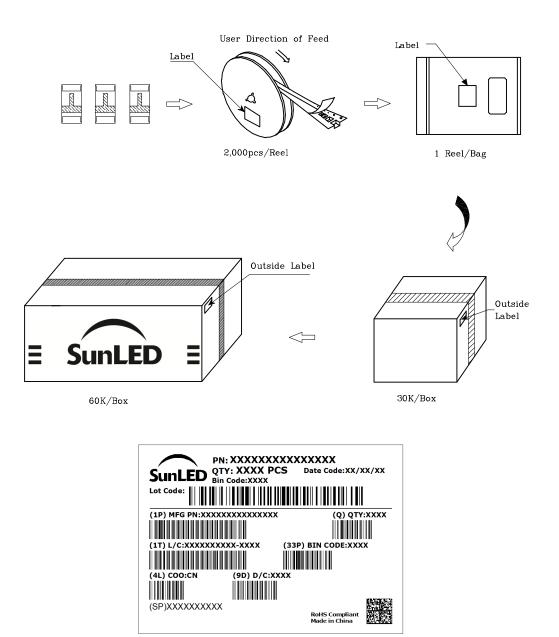
3. Forward Voltage: +/-0.1V $\,$

Note: Accuracy may depend on the sorting parameters.

Mar 02,2023



PACKING & LABEL SPECIFICATIONS



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- 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.
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