

## Part Number: XZM2CRK50W-2

3.0x2.0mm RIGHT ANGLE SMD LED

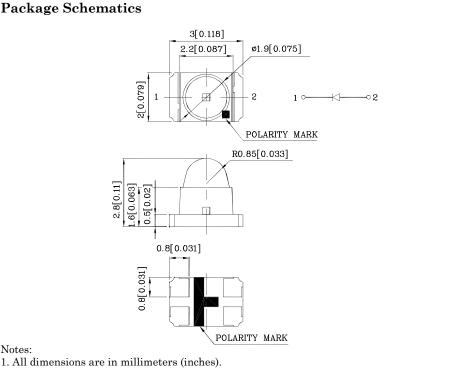
#### **Features**

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





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.

Notes:

3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =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	PD	84	mW	
Operating Temperature	TA	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

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 <sub>A</sub> =25°C)	Red (AlGaInP)	Unit		
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.2	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.8	V	
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA	
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λР	640*	nm	
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	625*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	20	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	27	$_{ m pF}$	

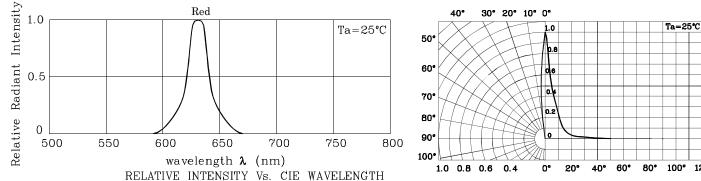
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZM2CRK50W-2	Red	AlGaInP	Water Clear	7000 2300*	10990 3790*	640*	10°

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

Sep 22,2016

XDSB7801 V2-X Layout: Maggie L.

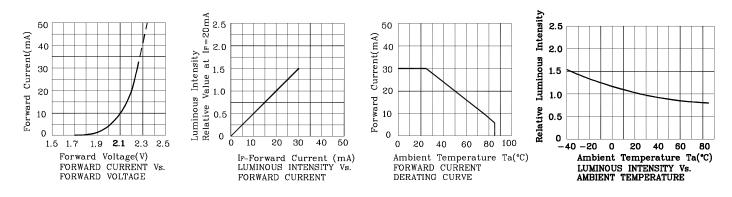




SPATIAL DISTRIBUTION

120°

Red



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

300 (°C) 10 s max 250 4°C/2 /s max 200 150~ -180 4°C/s max 150 Temperature 30~50s 80~120: 100 50 0 150 0 50 100 200 250 300 (sec) Tim Notes:

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

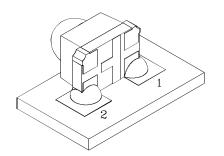
1. Maximum soldering temperature should not exceed 260°C

2. Recommended reflow temperature: 145°C-260°C Do not put stress to the epoxy resin during

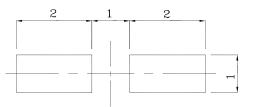
З. high temperatures conditions



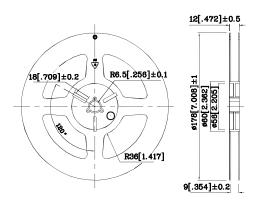
✤ The device has a single mounting surface. The device must be mounted according to the specifications.



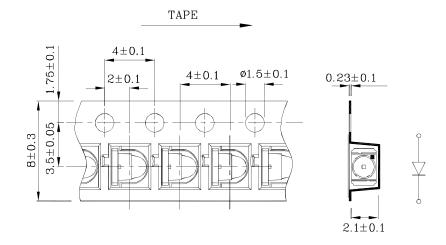
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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%

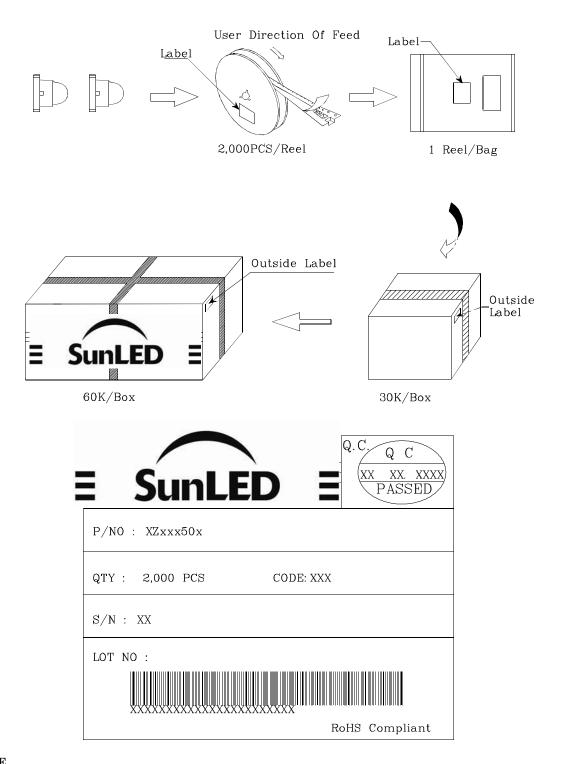
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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## **PACKING & LABEL SPECIFICATIONS**



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