

Part Number: XZM2CRK54WA-8

2.0 x 1.25 mm SMD Chip LED Lamp

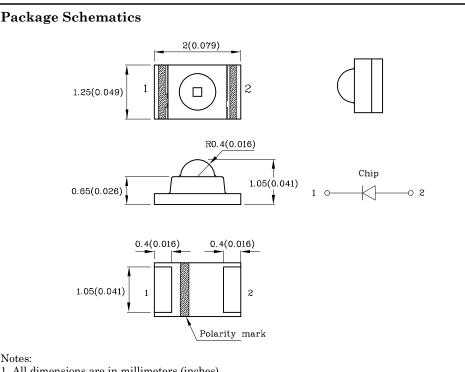
Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 3,000pcs/ 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). 2. Tolerance is $\pm 0.15(0.006")$ unless otherwise noted.

Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)		Red (AlGaInP)	Unit	
Reverse Voltage	$V_{\rm R}$	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	U	

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)	VF	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 λΡ	Viewing Angle 20 1/2
				min.	typ.		
XZM2CRK54WA-8	Red	AlGaInP	Water Clear	3000 1000*	5990 1990*	640*	40°

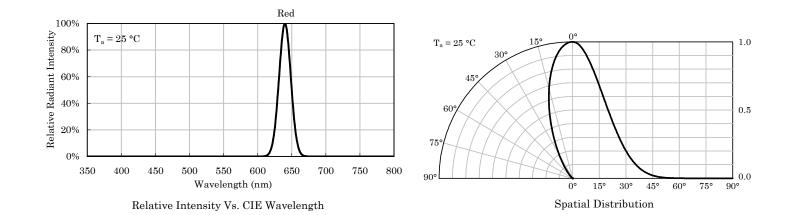
 ${\rm *Luminous\ intensity\ value\ and\ wavelength\ are\ in\ accordance\ with\ CIE127-2007\ standards.}$

Nov 30,2020

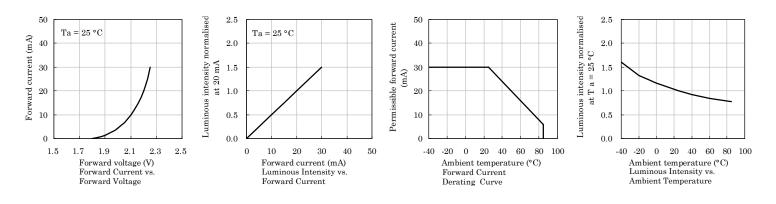
XDSB8977 V3-X Layout: Maggie L.



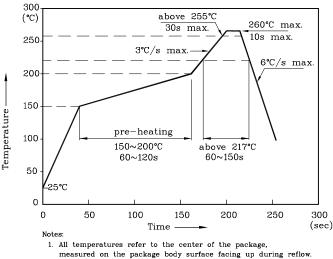
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* Red



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

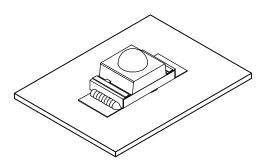


Reflow Soldering Profile for SMD Products (Pb-Free Components)

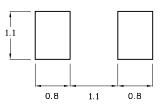
2. Do not apply any stress to the LED during high temperature conditions. 3. Maximum number of soldering passes: 2



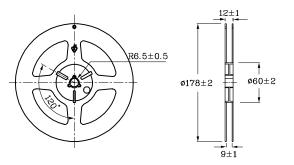
✤ The device has a single mounting surface. The device must be mounted according to the specifications.



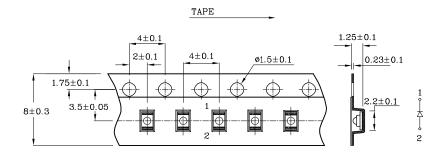
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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%

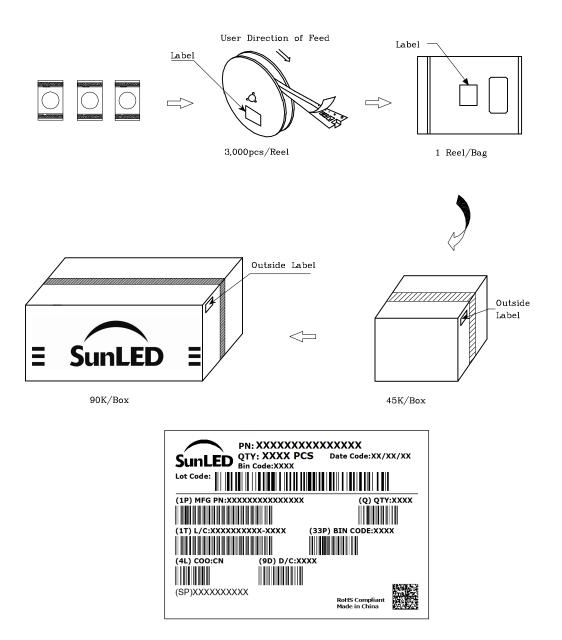
3. Forward Voltage: +/-0.1V $\,$

Note: Accuracy may depend on the sorting parameters.

Nov 30,2020



PACKING & LABEL SPECIFICATIONS



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- 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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