

### Part Number: XZCM2CRK53WA-1VF

1.6X0.8mm SMD CHIP LED LAMP

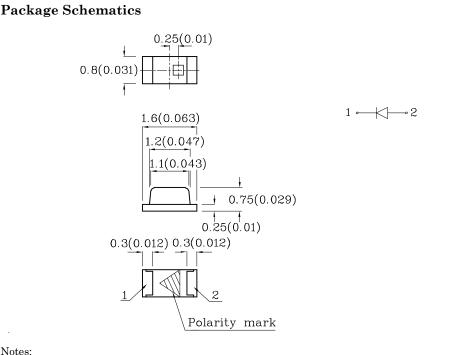
### Features

- 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
- Low current IF=2mA operating
- $\bullet$  RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



Notes: 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 <sub>A</sub> =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	$i_{\rm FS}$	150	mA	
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	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 <sub>A</sub> =25°C)		Red (AlGaInP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =2mA)	$V_{\mathrm{F}}$	1.8	V	
Forward Voltage (Max.) (I <sub>F</sub> =2mA)	$V_{\mathrm{F}}$	2.1	V	
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	μΑ	
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =2mA)	λP	640*	nm	
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =2mA)	λD	625*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =2mA)	$ riangle \lambda$	20	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	27	$_{\rm pF}$	

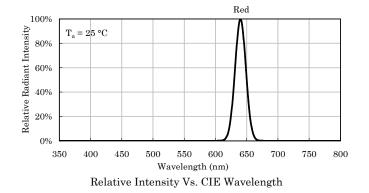
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =2mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZCM2CRK53WA-1VF	Red	AlGaInP	Water Clear	50 20*	98 39*	640*	120°

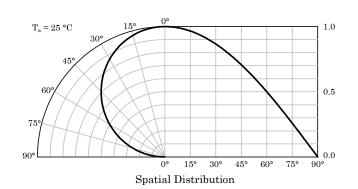
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

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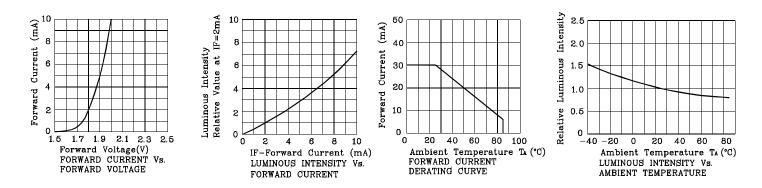
XDSB9350 V1-X Layout: Maggie L.



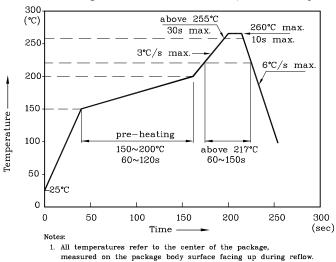




### ✤ Red



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



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

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



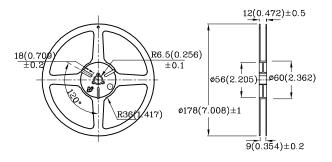
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✤ The device has a single mounting surface. The device must be mounted according to the specifications.

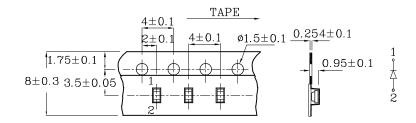
## Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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%

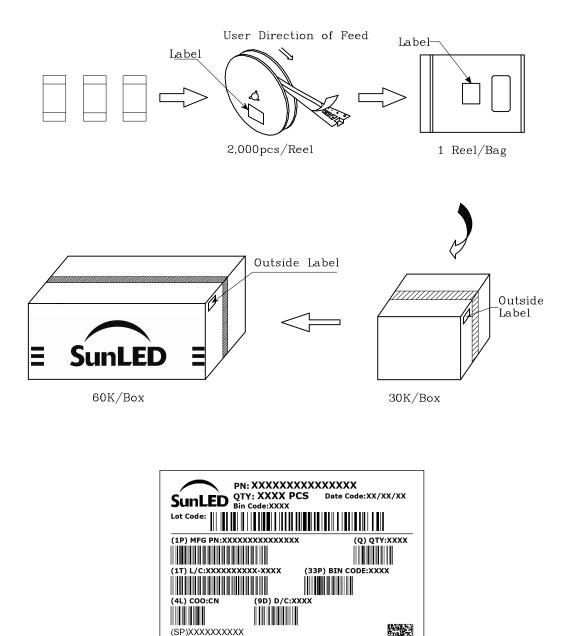
3. Forward Voltage: +/-0.1V  $\,$ 

Note: Accuracy may depend on the sorting parameters.

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# PACKING & LABEL SPECIFICATIONS



RoHS Complia Made in China

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