

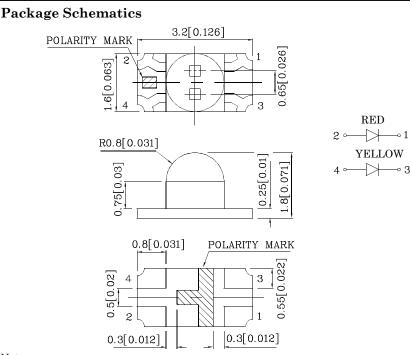
# Part Number: XZM2CRKCYK55W-8

3.2x1.6mm SMD CHIP LED LAMP

### Features

- $\bullet$  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





Notes:

1. All dimensions are in millimeters (inches).

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

3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Red (AlGaInP)	Yellow (AlGaInP)	Unit
Reverse Voltage	$V_{\mathrm{R}}$	5	5	V
Forward Current	$\mathbf{I}_{\mathbf{F}}$	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	150	140	mA
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	84	75	mW
Operating Temperature	TA	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		-0

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)	Yellow (AlGaInP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2.2	2	v
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2.8	2.5	v
Reverse Current (Max.) $(V_R=5V)$	$I_{R}$	10	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λP	640*	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	625*	590*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	20	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	27	45	pF

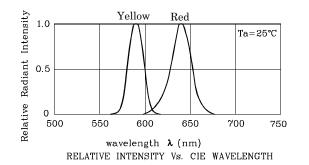
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZM2CRKCYK55W-8	Red	AlGaInP	Water Clear	3000 700*	4190 1295*	640*	30°
	Yellow	AlGaInP		400 400*	695* 695*	590*	

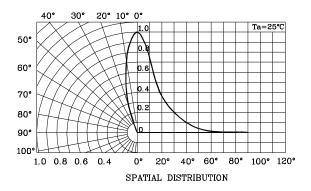
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Jul 25,2016

XDSB8739 V1-X Layout: Maggie L.

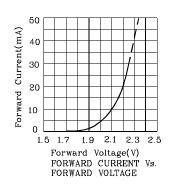


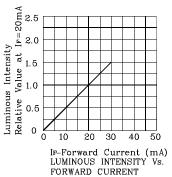
3.2x1.6mm SMD CHIP LED LAMP

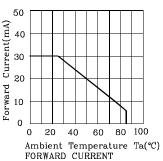




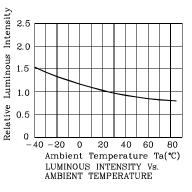
# Red



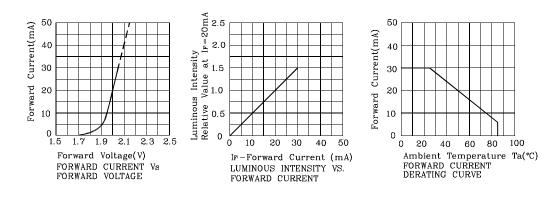


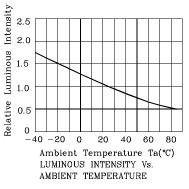


FORWARD CURRENT DERATING CURVE



# Yellow







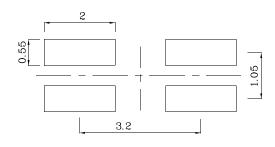
3.2x1.6mm SMD CHIP LED LAMP

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

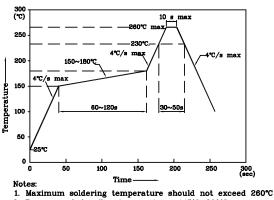
**\*** The device has a single mounting surface. The device must be mounted according to the specifications.

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

Reel Dimension



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



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

# Tape Specification (Units : mm)

#### TAPE $4.0 \pm 0.1$ ..75±0.1 $2.0 \pm 0.1$ R6.5[.256]±0,1 ø1.5±0.1 $0.229 \pm 0.1$ $4.0 \pm 0.1$ 18[.709]±0.2 93±0.1 ſ $3.5\pm0.05$ **8.0±0.3** 1 KŚΦŻ R36[1.417] TOP TAPE 9[.354]±0.2 3 1

#### 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.

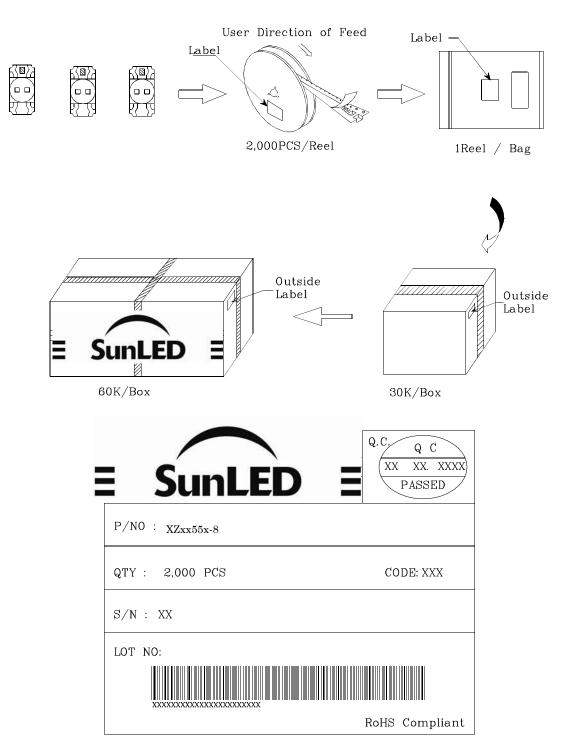
12[.472]±0.5

7.008]±: 78



3.2x1.6mm SMD CHIP LED LAMP

# 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.
- The contents within this document may not be altered without prior consent by SunLED.
  Additional technical notes are available at <u>http://www.SunLEDusa.com/TechnicalNotes.asp</u>

Jul 25,2016