

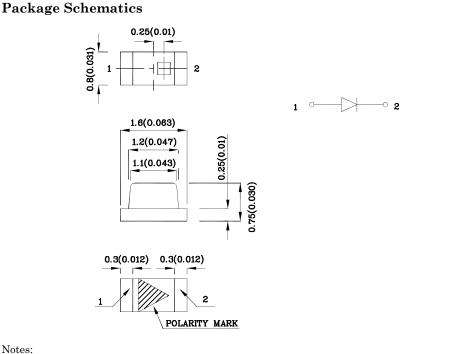
# Part Number: XZUY53W-1

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
- $\bullet$  RoHS compliant





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)		UY (GaAsP/ GaP)	Unit	
Reverse Voltage	verse Voltage V <sub>R</sub>			
Forward Current	$\mathbf{I}_{\mathbf{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	140	mA	
Power Dissipation	PD	75	mW	
Operating Temperature	TA	$-40 \sim +85$	°C	
Storage Temperature	Tstg	$-40 \sim +85$	C	

Operating Characteristics (T <sub>A</sub> =25°C)	UY (GaAsP/GaP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.1	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.5	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	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	588*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	20	$_{ m pF}$

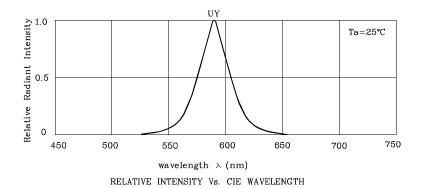
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZUY53W-1	Yellow	GaAsP/GaP	Water Clear	3*	7*	590*	120°

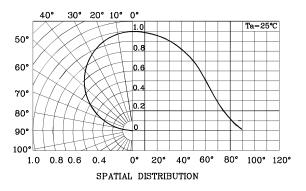
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Mar 25,2014

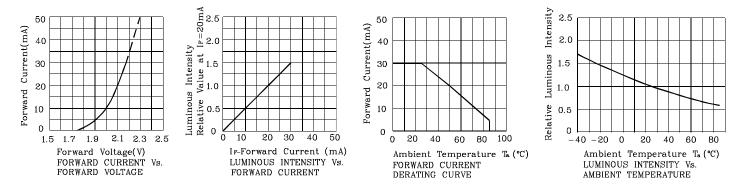
XDSA1223 V7-Z Layout: Maggie L.







## ♦ UY



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

300 (°C) 10 s max iner? 250 4°C/s C/s max 200 150~180 4°C/s max 150 Temperature 30~50s 80~120s 100 50 0 150 0 50 100 200 250 300 (sec) Time 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

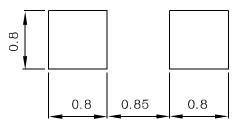
2. Recommended reflow temperature: 145°C-260°C 3. Do not put stress to the epoxy resin during

high temperatures conditions

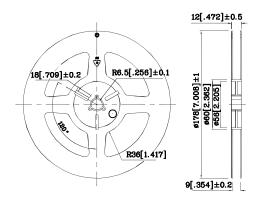


✤ The device has a single mounting surface. The device must be mounted according to the specifications.

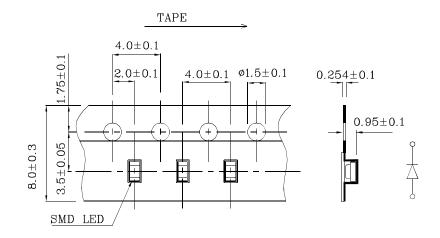
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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

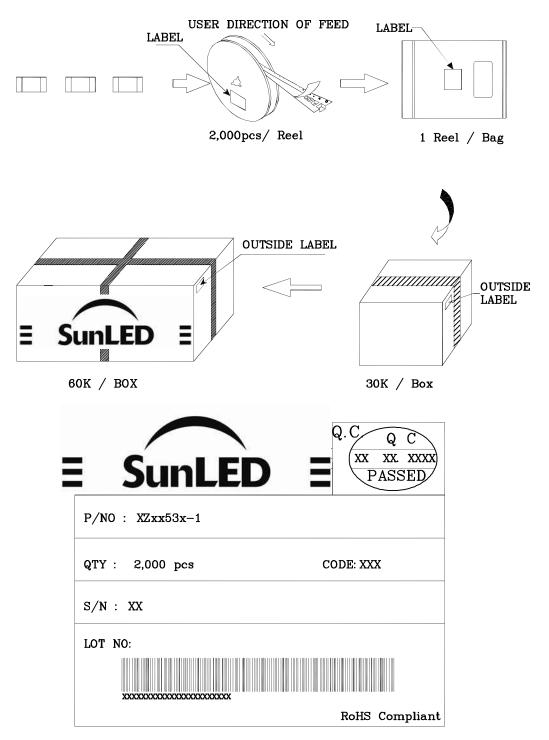
2. Luminous intensity / luminous flux: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



# **PACKING & LABEL SPECIFICATIONS**



### TERMS OF USE

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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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- User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
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