

Part Number: ZUY54W-1

2.0x1.25mm SMD CHIP LED LAMP

#### **Features**

• Ideal for indication light on hand held products

• Long life and robust package

• Variety of lens types and color choices available

 $\bullet$  Package : 2000 pcs / reel

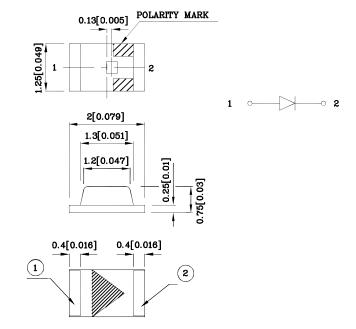
• Moisture sensitivity level : level 3

• RoHS compliant





## Package Schematics



#### 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 $(T_A=25^{\circ}C)$		UY (GaAsP/ GaP)	Unit	
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	140	mA	
Power Dissipation	$P_{D}$	75	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

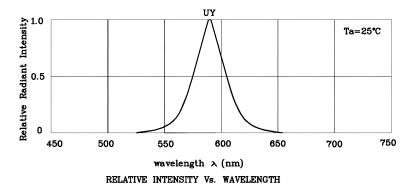
Operating Characteristics (T <sub>A</sub> =25°C)		UY (GaAsP/GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.1	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λΡ	590	nm
Wavelength of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λD	588	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$\triangle \lambda$	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	20	pF

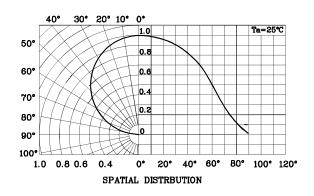
Part Number	Emitting Color	Emitting Material	Lens-color	Inter (I <sub>F</sub> =2	inous nsity 0mA) cd	Wavelength nm λP	Viewing Angle 20 1/2
				min.	typ.		
ZUY54W-1	Yellow	GaAsP/GaP	Water Clear	5	7	590	120°

Apr 11,2011 SDSA2452 V6 Layout: Maggie L.

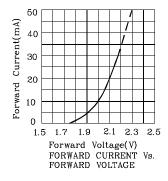


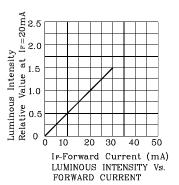


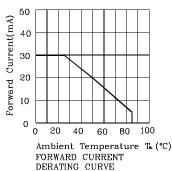


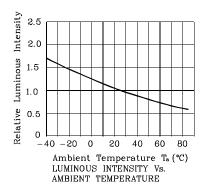


#### **&** UY



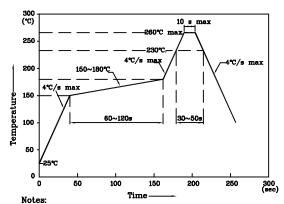






# LED is recommended for reflow soldering and soldering profile is shown below.

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

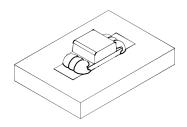


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions





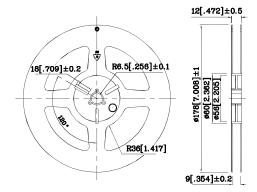
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



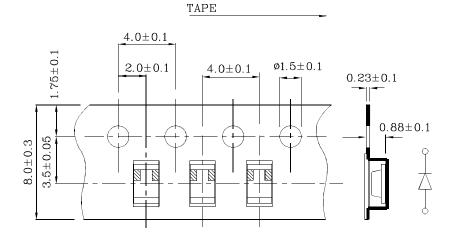
**❖** Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



#### **❖** 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

