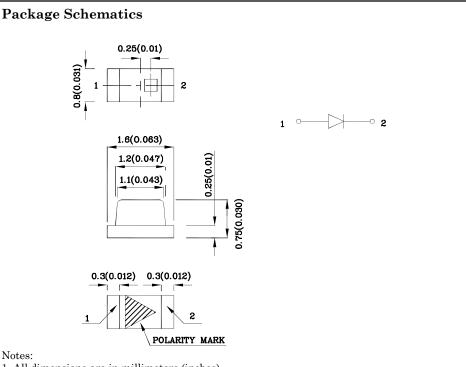


Part Number: XZVG53W-1

1.6X0.8mm SMD CHIP LED LAMP

- 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 _A =25°C)		VG (AlGaInP)	Unit
Reverse Voltage	V_{R}	5	V
Forward Current	I_F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA
Power Dissipation	PD	75	mW
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C
Storage Temperature	Tstg	-40 ~ +85	C

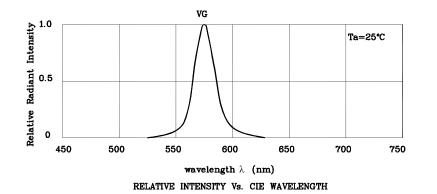
Operating Characteristics (T _A =25°C)		VG (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	2.1	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.5	V
Reverse Current (Max.) (V _R =5V)	I_R	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λP	574*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA)	λD	570*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$ riangle\lambda$	20	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	15	$_{\rm pF}$

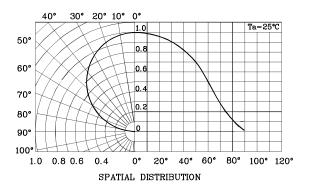
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZVG53W-1	Green	AlGaInP	Water Clear	20*	49*	574*	120°

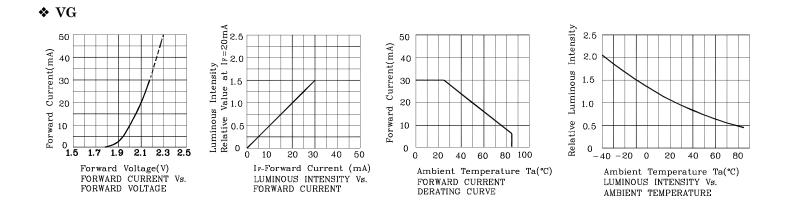
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Mar 10,2014

XDSA4412 V6-Z Layout: Maggie L.

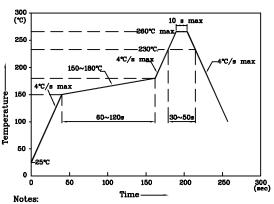








LED is recommended for reflow soldering and soldering profile is shown below.



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

1. Maximum soldering temperature should not exceed 260°C

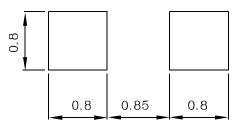
2. Recommended reflow temperature: 145°C-260°C 3. Do not put stress to the epoxy resin during

high temperatures conditions

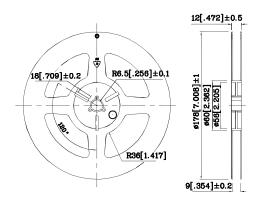


✤ The device has a single mounting surface. The device must be mounted according to the specifications.

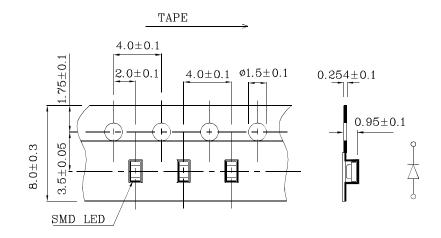
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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

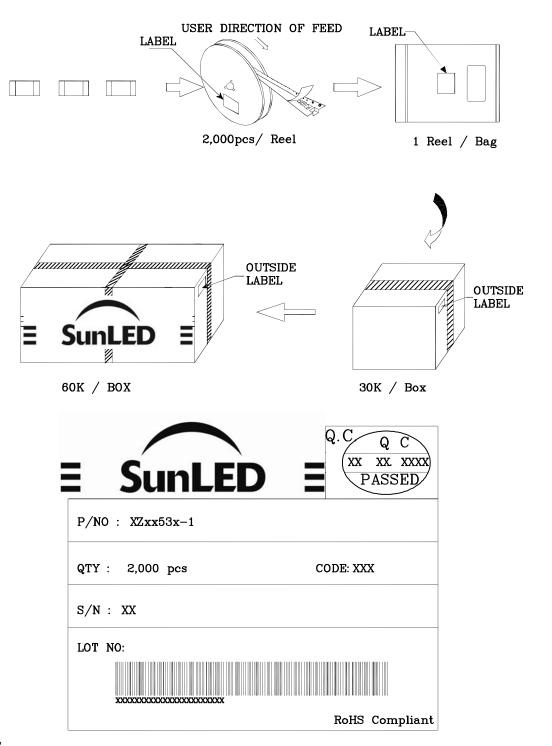
2. Luminous intensity / luminous flux: +/-15%

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

Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS



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