

### Part Number: XZDG54W-4

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
- ullet Package : 2000pcs / reel
- Moisture sensitivity level : level 3
- RoHS compliant



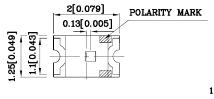




# ATTENTION

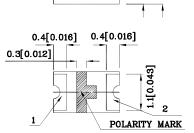
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

### Package Schematics



2[0.079] 1.3[0.051] 0.15[0.006]





### Notes:

1. All dimensions are in millimeters (inches).

1.2[0.047]

- 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)	DG (InGaN)	Unit		
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA	
Power Dissipation	$P_D$	102.5	mW	
Operating Temperature	$T_{A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Threshold (HBM)	450	V		

Operating Characteristics (T <sub>A</sub> =25°C)		DG (InGaN)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	3.3	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	4.1	V	
Reverse Current (Max.) $(V_R=5V)$	${ m I}_{ m R}$	50	uA	
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λΡ	515	nm	
Wavelength of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λD	525	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$\triangle \lambda$	30	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	45	pF	

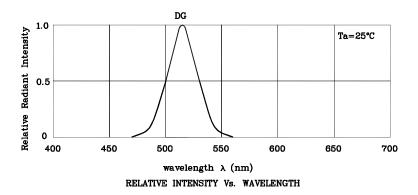
Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous} \\ \text{Intensity} \\ \text{(I_F=20mA)} \\ \text{mcd} \end{array}$		Wavelength nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZDG54W-4	Green	InGaN	Water Clear	280	447	515	110°

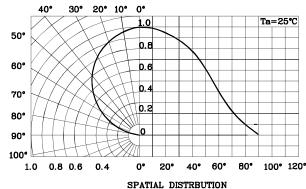
Apr 11,2011 XDSB4595 V2 Layout: Maggie L.



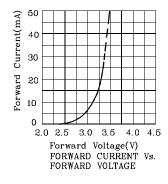


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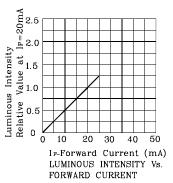


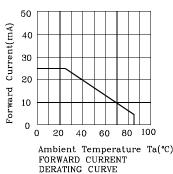


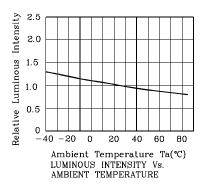
### **♦** DG



www.SunLEDusa.com

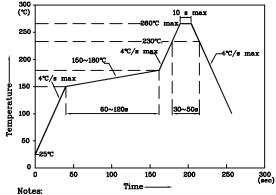






## LED is recommended for reflow soldering and soldering profile is shown below.

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

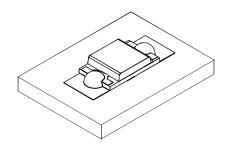


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

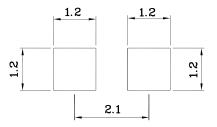




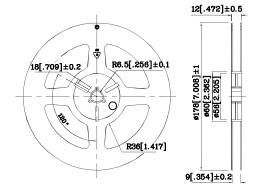
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



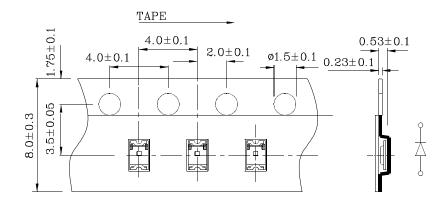
**❖** Recommended Soldering Pattern (Units:mm; Tolerance: ± 0.1)



### **❖** 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.

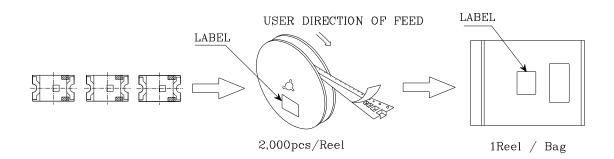
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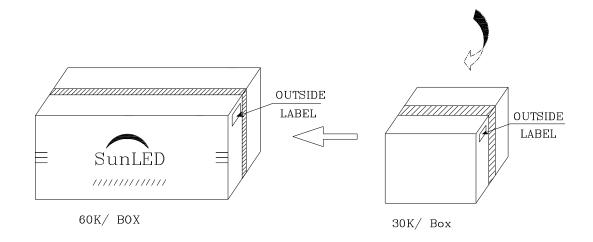
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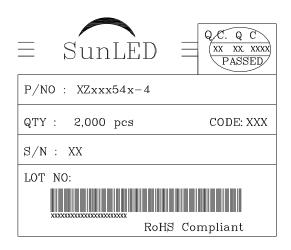




### PACKING & LABEL SPECIFICATIONS







Apr 11,2011