

Part Number: XZDG53W-6

1.6[0.063] 1.2[0.047]

1.6X0.8mm SMD CHIP LED LAMP (0.25mm Height)

2

0.1[0.004]

2

MARK

0.3[0.012]

POLARITY

1 °

--- **2**

Features

- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- Package: 2000pcs / reel
- Moisture sensitivity level : level 3
- RoHS compliant





Applications

 $1. Mobile \ phone \ Keypad \ indicator \ and \ backlight$.

2.Flat backlight for LCD, switch and symbol.

3.Toys.

Notes:	
1. All dimensions are in millimeters (inches	3).

Package Schematics

0.8[0.031]

0.25[0.01]±0.03

1

2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.

1

3. Specifications are subject to change without notice.

0.3[0.012]

Absolute Maximum Ratings (T _A =25°C)		DG (InGaN)	Unit	
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Current	I_F	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA	
Power Dissipation	PD	102.5	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg -40 ~ +85		-0	
Electrostatic Discharge Threshold (HBM)	450	V		

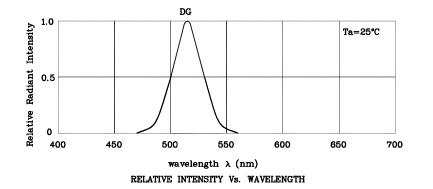
Operating Characteristics (T _A =25°C)		DG (InGaN)	Unit	
Forward Voltage (Typ.) (I _F =20mA)	$V_{\rm F}$	3.3	V	
Forward Voltage (Max.) (I _F =20mA)	$V_{\rm F}$	4.1	V	
Reverse Current (Max.) (V _R =5V)	I_R	50	uA	
Wavelength of Peak Emission (Typ.) (I _F =20mA)	λP	515	nm	
Wavelength of Dominant Emission (Typ.) (I _F =20mA)	λD	525	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$ riangle\lambda$	30	nm	
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	45	$_{\rm pF}$	

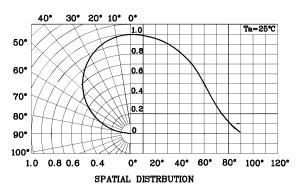
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZDG53W-6	Green	InGaN	Water Clear	280	497	515	120°

XDSB2079 V2 Layout: Maggie L.

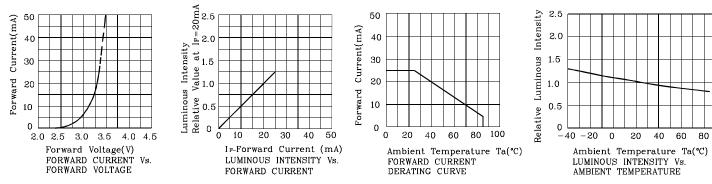
P. 1/4



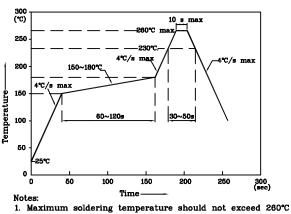








LED is recommended for reflow soldering and soldering profile is shown below.



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

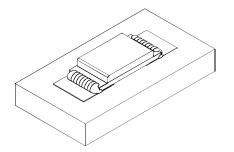
Recommended reflow temperature: 145°C-260°C
Do not put stress to the epoxy resin during

3. Do not put stress to the epoxy resin during high temperatures conditions

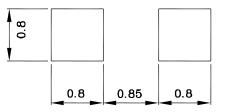
P. 2/4



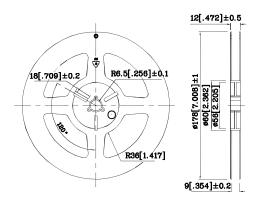
The device has a single mounting surface. The device must be mounted according to the specifications.



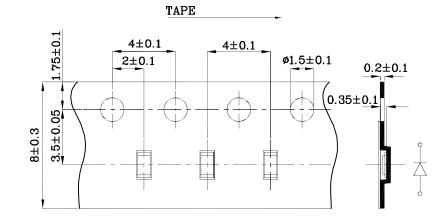
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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.

Apr 09,2011



PACKING & LABEL SPECIFICATIONS

