

### Part Number: XZDG147W

3.2x2.4mm SMD CHIP LED LAMP

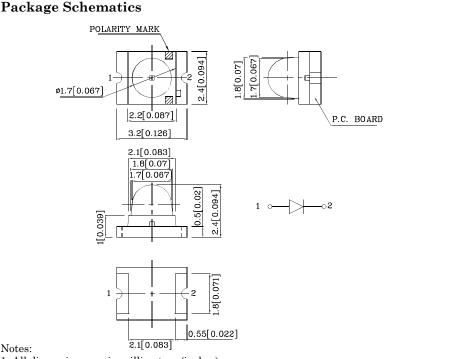
### Features

- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- Package : 1500pcs / reel
- Moisture sensitivity level : level 3
- RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



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.

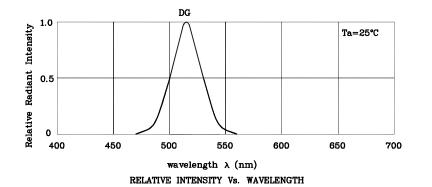
Absolute Maximum Ratings (T <sub>A</sub> =25°C)	DG (InGaN)	Unit		
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$\mathbf{I}_{\mathbf{F}}$	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA	
Power Dissipation	PD	102.5	mW	
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$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

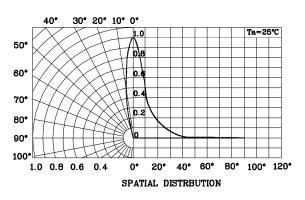
Operating Characteristics (T <sub>A</sub> =25°C)		DG (InGaN)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	3.3	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	4.1	V	
Reverse Current (Max.) $(V_R=5V)$	$I_R$	50	uA	
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λP	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)	$ riangle\lambda$	30	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	45	pF	

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZDG147W	Green	InGaN	Water Clear	1900	2990	515	20°

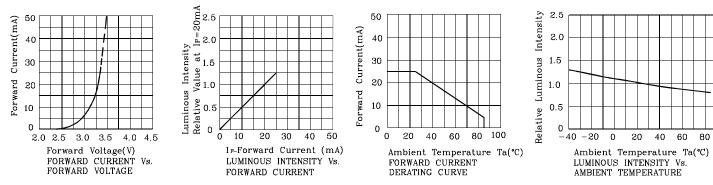
XDSB6191 V1 Layout: Maggie L.



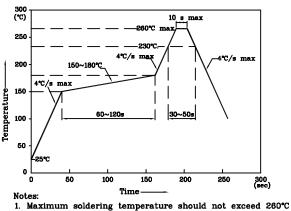








# LED is recommended for reflow soldering and soldering profile is shown below.



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

2. Recommended reflow temperature: 145°C-260°C

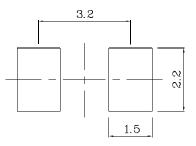
3. Do not put stress to the epoxy resin during high temperatures conditions

P. 2/4

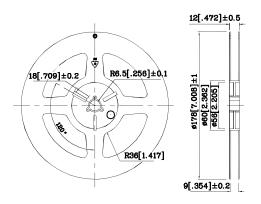


✤ The device has a single mounting surface. The device must be mounted according to the specifications.

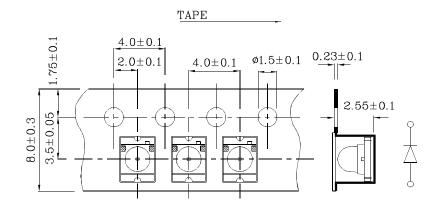
### Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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.

Jul 01,2011



### PACKING & LABEL SPECIFICATIONS

