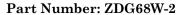
www.SunLED.com



1.0X0.5mm SMD CHIP LED LAMP

#### **Features**

- ullet 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
- ullet Moisture sensitivity level : level 3
- •RoHS compliant



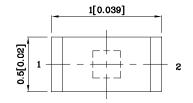


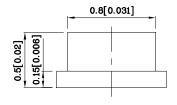


# ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE

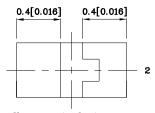
DEVICES

## 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 <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	$i_{\mathrm{FS}}$	150	mA	
Power Dissipation	$P_{D}$	102.5	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

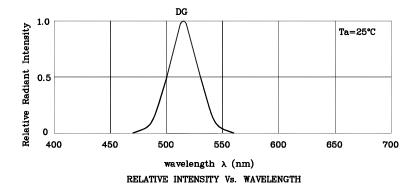
Operating Characteristics (T <sub>A</sub> =25°C)		DG (InGaN)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	3.3	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	4.1	V	
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	50	uA	
Wavelength of Peak Emission (Typ.) (I <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	

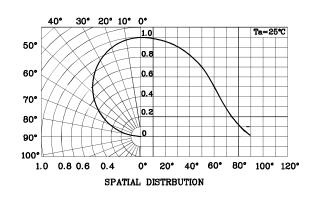
Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous} \\ \text{Intensity} \\ \text{(I_F=20mA)} \\ \text{mcd} \end{array}$		Wavelength nm $\lambda P$	Viewing Angle 20 1/2
				min.	typ.		
ZDG68W-2	Green	InGaN	Water Clear	300	447	515	120°

Jan 17,2011 SDSA7998 V1 Layout: Maggie L.

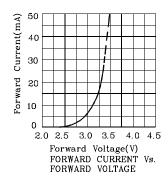


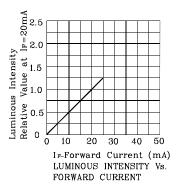


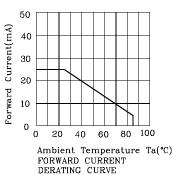


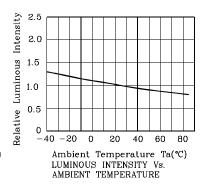


#### **♦** DG



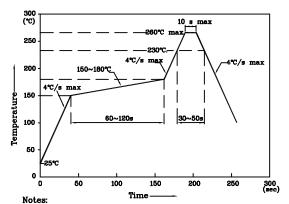






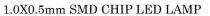
## LED is recommended for reflow soldering and soldering profile is shown below.

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

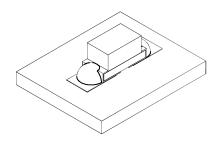


- 1. Maximum soldering temperature should not exceed 260°C
- Recommended reflow temperature: 145°C-260°C
- Do not put stress to the epoxy resin during high temperatures conditions

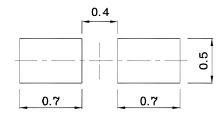




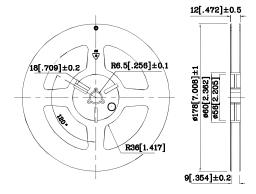
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



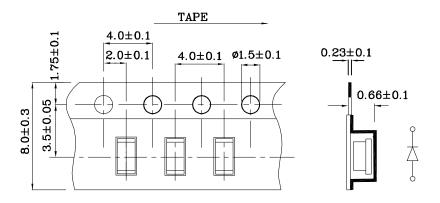
**♦** Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



#### **❖** 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.

Jan 17,2011

SDSA7998 V1 Layout: Maggie L.

1.0X0.5mm SMD CHIP LED LAMP

#### PACKING & LABEL SPECIFICATIONS

