



T-1 3/4 (5mm) LED LAMP WITH WEDGE BASE

# **Features**

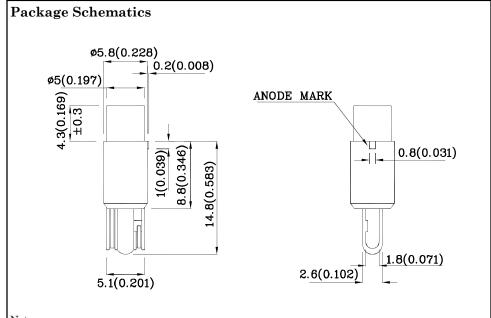
- Housing material: Type 66 Nylon
- Housing UL rating: 94V-0
- $\bullet$  Reliable & robust
- $\bullet$  5V internal resistor
- RoHS Compliant







ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  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 Voltage	$V_{\mathrm{F}}$	6	V	
Power Dissipation	PD	85	mW	
Operating Temperature	$T_A$ -40 ~ +70		°C	
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Threshold (HBM)	450	V		
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds			
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds			

Operating Characteristics (T <sub>A</sub> =25°C)		DG (InGaN)	Unit
Forward Current (Typ.) $(V_F=5V)$	$I_{\mathrm{F}}$	7.5	mA
Forward Current (Max.) (V <sub>F</sub> =5V)	$I_{\mathrm{F}}$	10	mA
Reverse Current (Max.) $(V_R=5V)$	$I_R$	50	uA
Wavelength of Peak Emission CIE127-2007*(Typ.) (V <sub>F</sub> =5V)	λР	515*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (V <sub>F</sub> =5V)	λD	525*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (V <sub>F</sub> =5V)	Δλ	30	nm

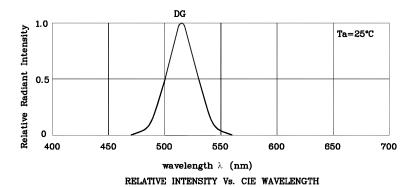
Part Number	Emitting Color	Emitting Material	Lens-color	CIE	Luminous Intensity CIE127-2007* $(V_F=5V) \text{ mcd}$		No. Viewing 7* Angle 2θ 1/2
				min.	typ.		
XNZSDG52W5	SV02 Green	InGaN	Water Clear	280*	500*	515*	70°

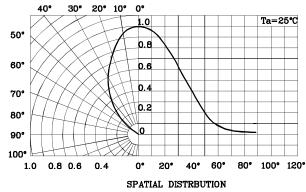
<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

May 06,2012 XDSB5598 V2-Z Layout: Maggie L.

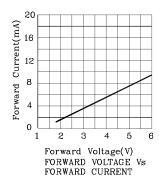


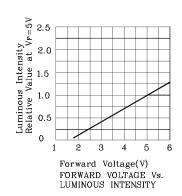


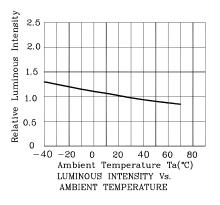




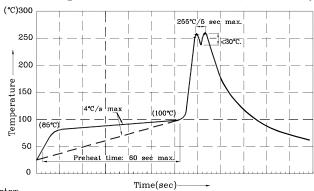
# **♦** DG







Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



### Notes:

- Notes. I. Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of  $260^{\circ}C$  2. Peak wave soldering temperature between  $245^{\circ}C$   $\sim$   $255^{\circ}C$  for 3 sec
- (5 sec max).
- $3.\mathrm{Do}$  not apply stress to the epoxy resin while the temperature is above  $85^{\circ}\mathrm{C}$ .  $4.\mathrm{Fixtures}$  should not incur stress on the component when mounting and during soldering process. 5.SAC 305 solder alloy is recommended.
- 6. No more than one wave soldering pass.

#### Remarks:

If special sorting is required (e.g. binning based on 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%

Note: Accuracy may depend on the sorting parameters.

May 06,2012



# PACKING & LABEL SPECIFICATIONS

www.SunLEDusa.com

