

## T-1 3/4 (5mm) SOLID STATE LAMP

PRELIMINARY SPEC

WP7083SGD

SUPER BRIGHT GREEN

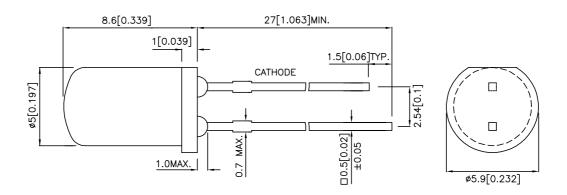
## **Features**

- OUTSTANDING MATERIAL EFFICIENCY.
- •RELIABLE AND RUGGED.
- ●I.C. COMPATIBLE.
- ●RoHS COMPLIANT.

## **Description**

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

## **Package Dimensions**



### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.25(0.01") unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge package.
- Specifications are subject to change without notice.

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## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	201/2
WP7083SGD	SUPER BRIGHT GREEN (GaP)	GREEN DIFFUSED	10	35	60°

## Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Green	565		nm	IF=20mA
λD	Dominant Wavelength	Super Bright Green	568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	IF=20mA
С	Capacitance	Super Bright Green	15		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Green	2.2	2.5	V	IF=20mA
IR	Reverse Current	Super Bright Green		10	uA	VR = 5V

## Absolute Maximum Ratings at TA=25°C

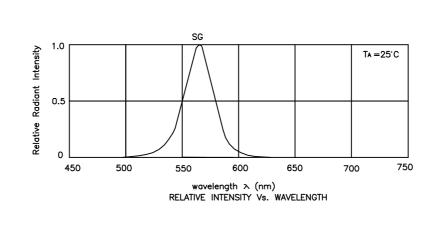
Parameter	Super Bright Green	Units	
Power dissipation	105	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	140	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
  2. 2mm below package base.
- 3. 5mm below package base.

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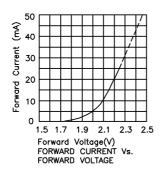
 $<sup>1. \, \</sup>theta 1/2$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

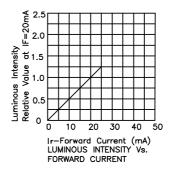
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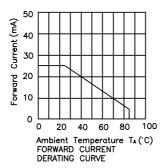


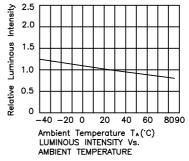
Super Bright Green

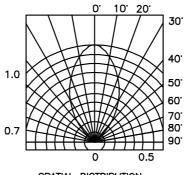
**WP7083SGD** 







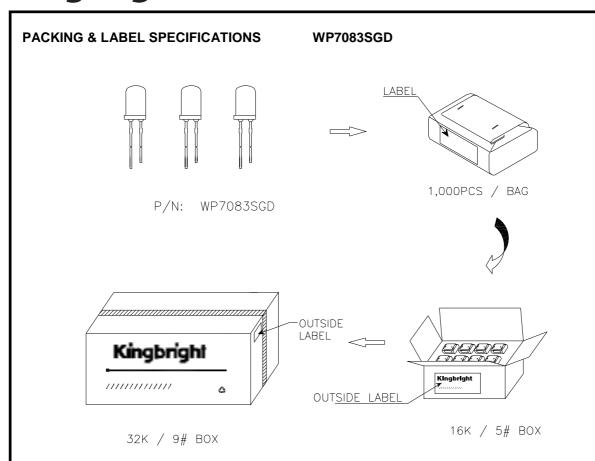


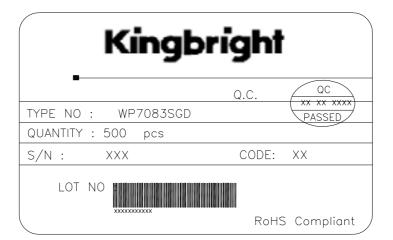


SPATIAL DISTRIBUTION

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## Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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