

PRELIMINARY SPEC

Part Number: WP5603VGDL/SD/Z

GREEN



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

### Features

- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- I.C. COMPATIBLE/LOW CURRENT CAPABILITY.
- RoHS COMPLIANT.

### Description

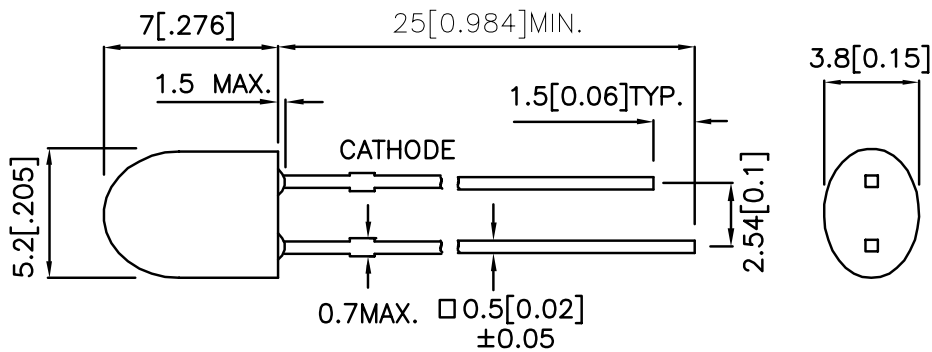
The Green source color devices are made with InGaN Light Emitting Diode.

Static electricity and surge damage the LEDs.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

### Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$  (0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2 θ 1/2
WP5603VGDL/SD/Z	GREEN (InGaN)	GREEN SEMI DIFFUSED	2800	6000	100°(H) 50°(V)

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous Intensity / Luminous Flux: +/-15%.

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

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Green	525		nm	I <sub>F</sub> =20mA
λ <sub>D</sub> [1]	Dominant Wavelength	Green	535		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	Green	39		nm	I <sub>F</sub> =20mA
C	Capacitance	Green	65		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub> [2]	Forward Voltage	Green	3.2	3.7	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Green		10	uA	V <sub>R</sub> = 5V

Notes:

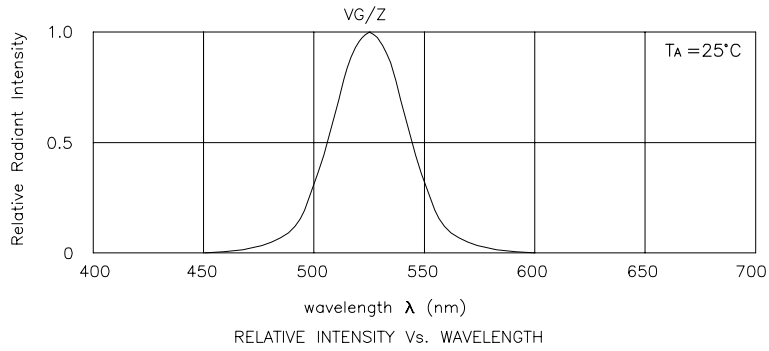
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

Parameter	Green	Units
Power dissipation	111	mW
DC Forward Current	30	mA
Peak Forward Current [1]	100	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	

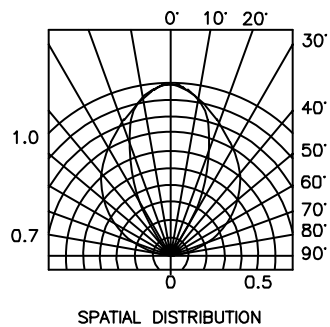
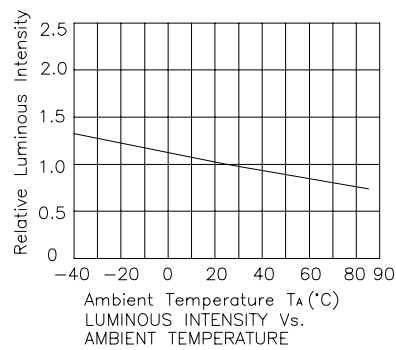
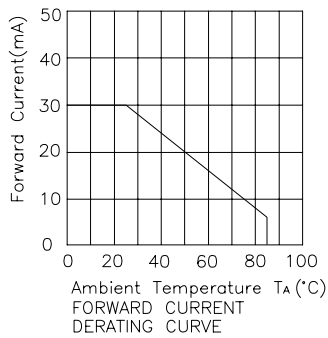
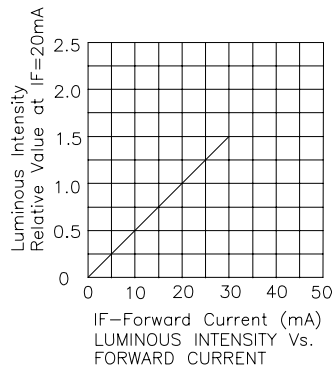
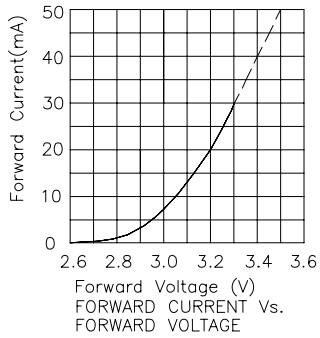
Notes:

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



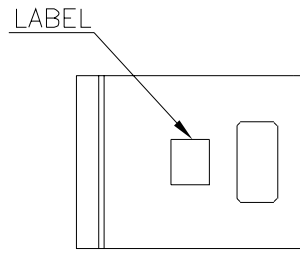
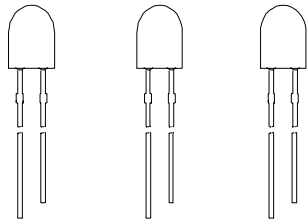
Green

WP5603VGDL/SD/Z



## PACKING & LABEL SPECIFICATIONS

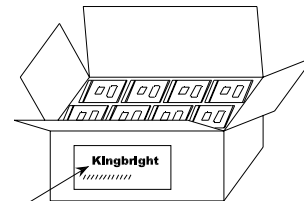
WP5603VGDL/SD/Z



500PCS / BAG




OUTSIDE LABEL



OUTSIDE LABEL

20K / 9# BOX

10K / 5# BOX

<b>Kingbright</b>				
Q.C.	<table border="1"> <tr> <td>QC</td> </tr> <tr> <td>xx-xx-xxxx</td> </tr> <tr> <td>PASSED</td> </tr> </table>	QC	xx-xx-xxxx	PASSED
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PASSED				
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QUANTITY :	500 pcs			
S/N :	xxx			
CODE:	XX			
LOT NO:	 xxxxxxxxxx			
RoHS Compliant				