

### PRELIMINARY SPEC

Part Number: WP5603PBDL/SD/Z

BLUE



**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

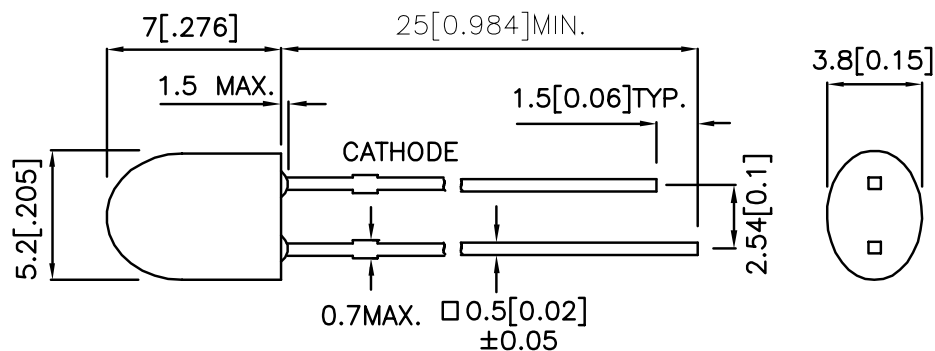
The Blue source color devices are made with InGaN Light Emitting Diode.

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.	2θ1/2
WP5603PBDL/SD/Z	BLUE (InGaN)	BLUE SEMI DIFFUSED	650	1600	100°(H) 50°(V)

Notes:

1. 01/2 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
$\lambda_{peak}$	Peak Wavelength	Blue	458		nm	IF=20mA
$\lambda_D$ [1]	Dominant Wavelength	Blue	465		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	22		nm	IF=20mA
C	Capacitance	Blue	110		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.2	3.7	V	IF=20mA
IR	Reverse Current	Blue		10	uA	VR = 5V

Notes:

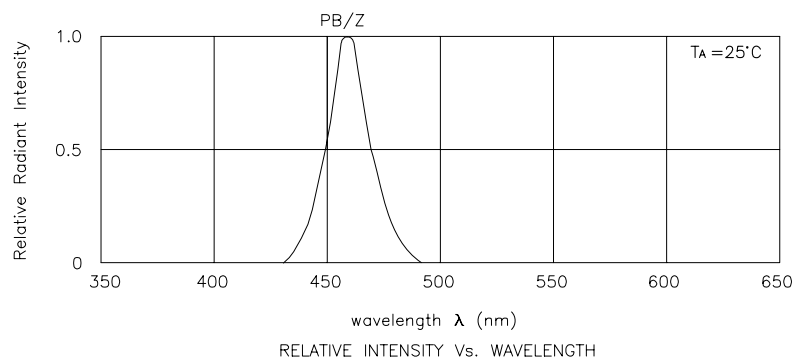
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

Parameter	Blue	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	

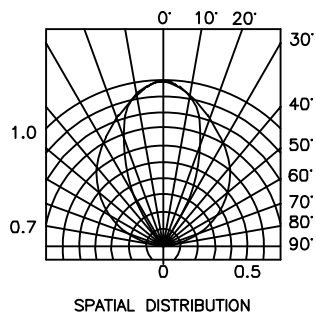
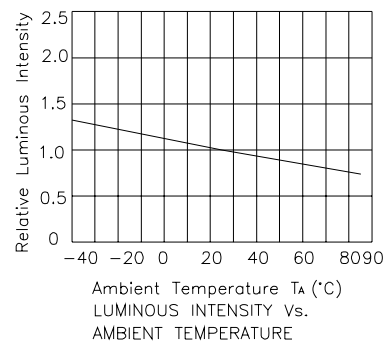
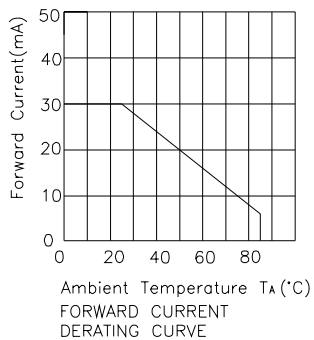
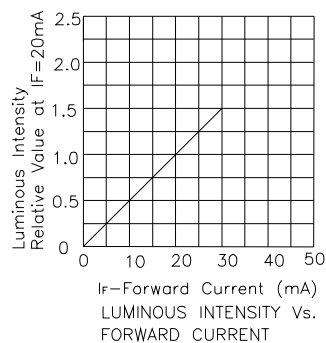
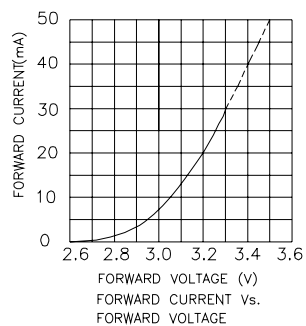
Notes:

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



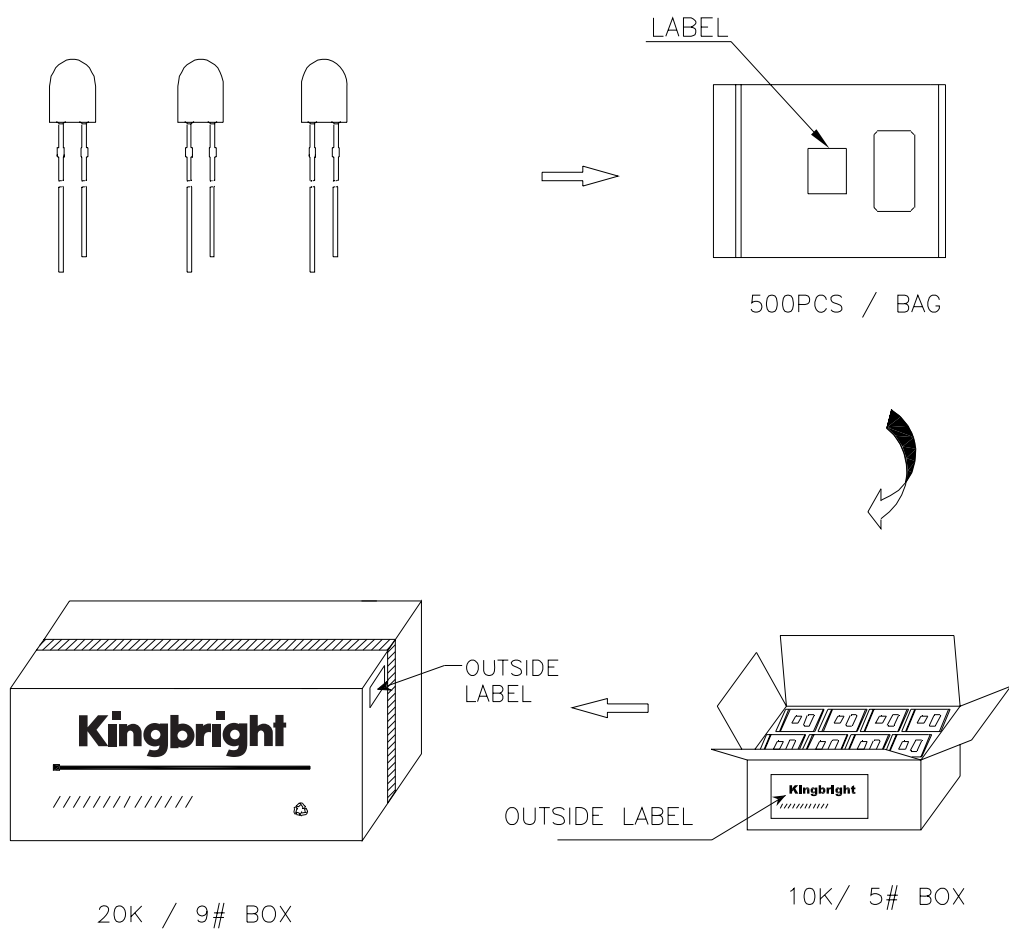
Blue


WP5603PBDL/SD/Z



PACKING & LABEL SPECIFICATIONS

WP5603PBDL/SD/Z



<b>Kingbright</b>	
Q.C.	
TYPE NO : WP5603XXX	
QUANTITY : 500 pcs	
S/N : XXX	CODE: XX
LOT NO:  xxxxxxxxxx	
RoHS Compliant	