

### 4mm SOLID STATE LAMP

WP44GD

**GREEN** 

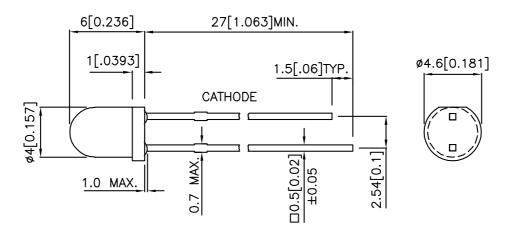
### **Features**

- •LOW POWER CONSUMPTION.
- •VERSATILE MOUNTING ON P.C. BOARD OR PANEL.
- ●POPULAR 4mm DIAMETER.
- •RELIABLE AND RUGGED.
- ●RoHS COMPLIANT.

## **Description**

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

# **Package Dimensions**



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

SPEC NO: DSAF2366 APPROVED: J. Lu

**REV NO: V.1 CHECKED: Allen Liu**  **DATE: APR/19/2005** DRAWN: S.H.CHEN

PAGE: 1 OF 4 ERP:1101004545

# Kingbright

### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 10mA		Viewing Angle
	2.00		Min.	Тур.	201/2
WP44GD	GREEN (GaP)	GREEN DIFFUSED	3	12	80°

# Electrical / Optical Characteristics at Ta=25°C

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

## Absolute Maximum Ratings at TA=25°C

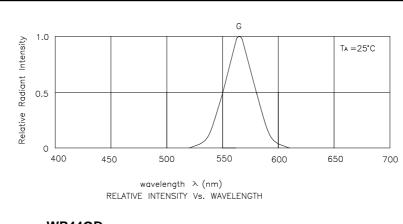
Parameter	Green	Units		
Power dissipation	105	mW		
DC Forward Current	25	mA		
Peak Forward Current [1]	140	mA		
Reverse Voltage	5	V		
Operating/Storage Temperature	-40°C To +85°C			
Lead Solder Temperature [2]	260°C For 3 Seconds			
Lead Solder Temperature [3] 260°C For 5 Seconds				

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

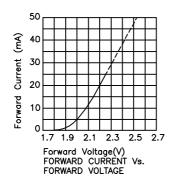
SPEC NO: DSAF2366 REV NO: V.1 DATE: APR/19/2005 PAGE: 2 OF 4 APPROVED: J. Lu CHECKED: Allen Liu DRAWN: S.H.CHEN ERP:1101004545

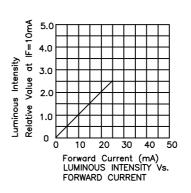
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

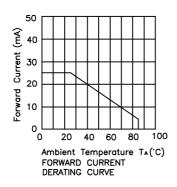
# Kingbright

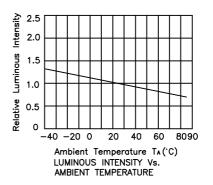


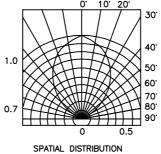
Green WP44GD











#### Remarks:

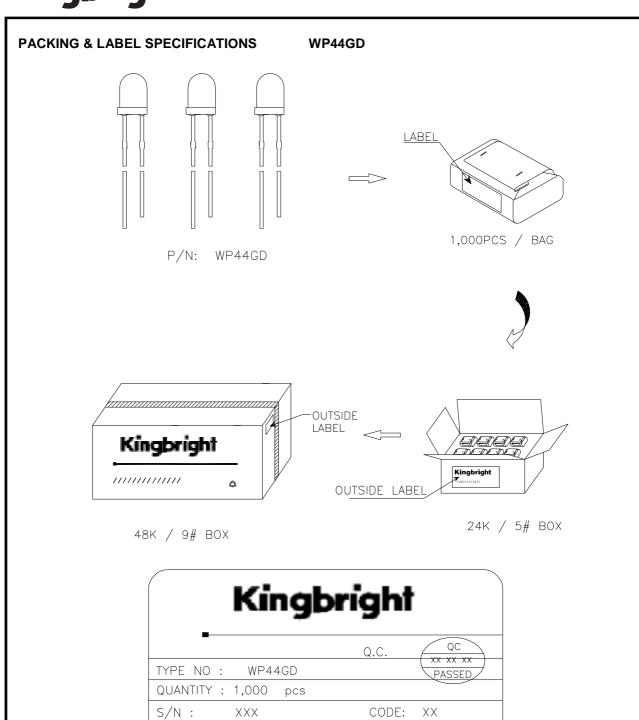
If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

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

Note: Accuracy may depend on the sorting parameters.

SPEC NO: DSAF2366 REV NO: V.1 DATE: APR/19/2005 PAGE: 3 OF 4
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: S.H.CHEN ERP:1101004545

# Kingbright



#### 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:

LOT NO

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

Note: Accuracy may depend on the sorting parameters.

 SPEC NO: DSAF2366
 REV NO: V.1
 DATE: APR/19/2005
 PAGE: 4 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: S.H.CHEN
 ERP:1101004545

RoHS Compliant