

## 4mm CYLINDRICAL LED LAMP

WP1413GDT

**GREEN** 

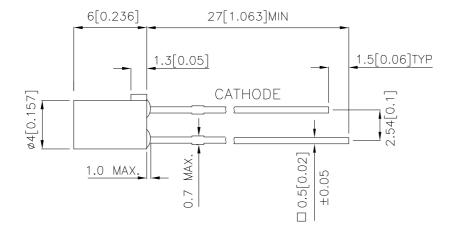
## **Features**

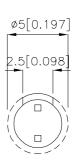
- CYLINDRICAL TYPE, FLAT TOP.
- CONVEX CATHODE MARK ON BODY.
- LOW POWER CONSUMPTION.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

# **Description**

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

# **Package Dimensions**





## Notes:

- 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.

SPEC NO: DSAF2538 APPROVED: J. Lu

**REV NO: V.1** 

CHECKED: Allen Liu

DATE: APR/16/2005

DRAWN: B.H.LI

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# **Kingbright**

## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 10mA		Viewing Angle
			Min.	Тур.	201/2
WP1413GDT	GREEN (GaP)	GREEN DIFFUSED	1	3	100°

#### Note

# 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
lR	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			

## Notes:

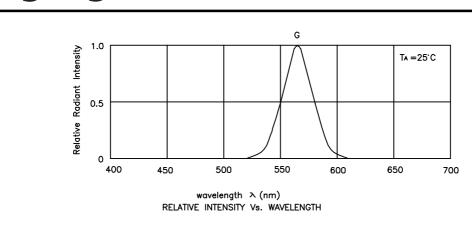
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

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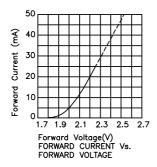
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

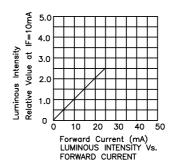
# Kingbright

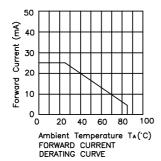


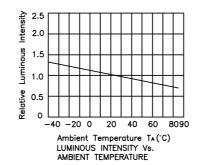
Green

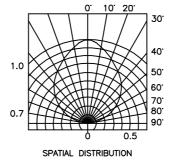
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### Remarks

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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