

4mm CYLINDRICAL LED LAMP

WP1413GDT

GREEN

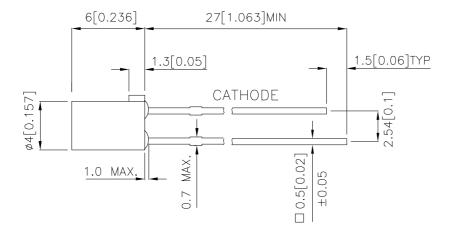
Features

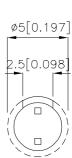
- CYLINDRICAL TYPE, FLAT TOP.
- CONVEX CATHODE MARK ON BODY.
- LOW POWER CONSUMPTION.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

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
 REV NO: V.1
 DATE:APR/16/2005
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 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: B.H.LI
 ERP: 1101001454

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:

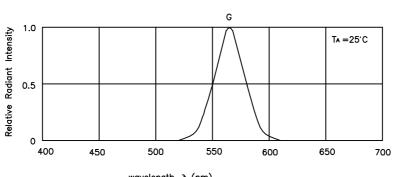
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

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^{1.} θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

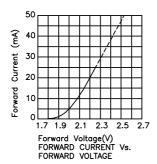
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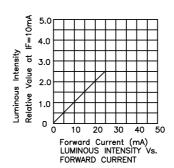


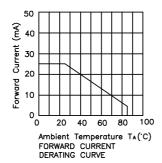
wavelength λ (nm) RELATIVE INTENSITY Vs. WAVELENGTH

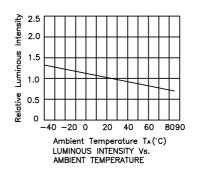
Green

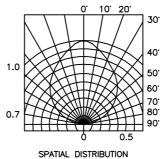
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Remarks

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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