

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









1.8mm TRI-LEVEL LED INDICATOR

Part Number: WP4060XH/3GD Green

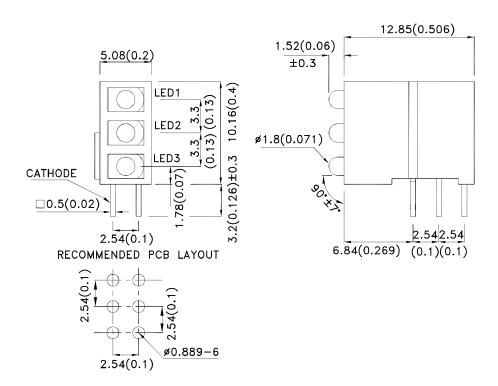
Features

- Pre-trimmed leads for pc mounting.
- Black case enhances contrast ratio.
- Wide viewing angle.
- High reliability life measured in years.
- Housing UL rating:94V-0.
- Housing material: type 66 nylon.
- 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 ±0.25(0.01") unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge from the package.

 4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

SPEC NO: DSAE9386 **REV NO: V.5** DATE: APR/07/2011 PAGE: 1 OF 5 CHECKED: Allen Liu APPROVED: WYNEC DRAWN: J.Yu ERP: 1102013557

Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) [2] @ 10mA | | Viewing Angle [1] |
|--------------|-------------|----------------|------------------------|------|----------------------|
| | | 2. | Min. | Тур. | 201/2 |
| WP4060XH/3GD | Green (GaP) | Green Diffused | 6 | 12 | 70° |

- 1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
 2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|--------|------|------|-------|---------------------|
| λpeak | Peak Wavelength | Green | 565 | | nm | IF=20mA |
| λD [1] | 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 [2] | Forward Voltage | Green | 2.2 | 2.5 | V | IF=20mA |
| lr | Reverse Current | Green | | 10 | uA | V _R = 5V |

Notes:

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

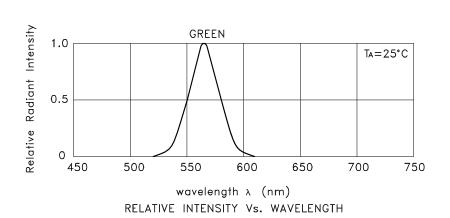
Absolute Maximum Ratings at TA=25°C

| Parameter | Green | Units | | |
|-------------------------------|---------------------|-------|--|--|
| Power dissipation | 62.5 | 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 | | | |

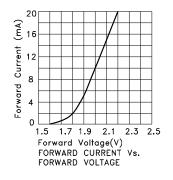
Notes:

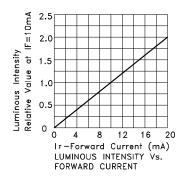
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
 2. 2mm below package base.
- 3. 5mm below package base.

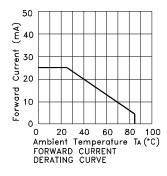
SPEC NO: DSAE9386 **REV NO: V.5** DATE: APR/07/2011 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: J.Yu ERP: 1102013557

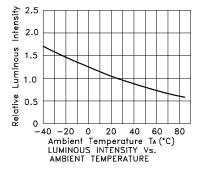


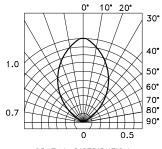
Green WP4060XH/3GD







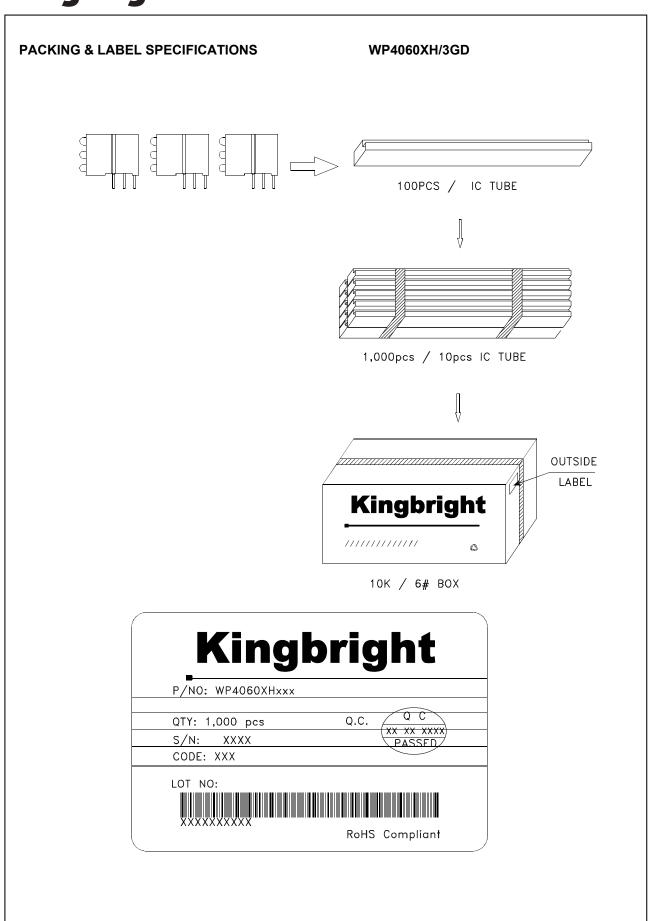




SPATIAL DISTRIBUTION

 SPEC NO: DSAE9386
 REV NO: V.5
 DATE: APR/07/2011
 PAGE: 3 OF 5

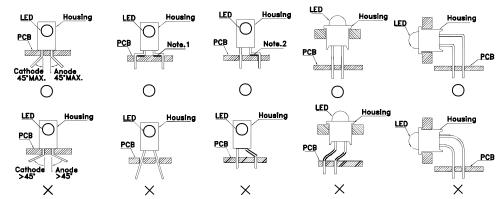
 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: J.Yu
 ERP: 1102013557



SPEC NO: DSAE9386 APPROVED: WYNEC REV NO: V.5 CHECKED: Allen Liu DATE: APR/07/2011 DRAWN: J.Yu PAGE: 4 OF 5 ERP: 1102013557

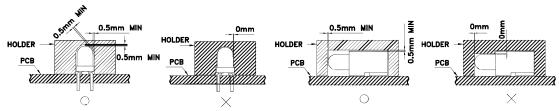
PRECAUTIONS

 The lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement. Lead—forming may be required to insure the lead pitch matches the hole pitch. Refer to the figure below for proper lead forming procedures.

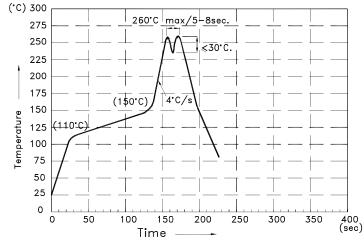


"() " Correct mounting method "imes" Incorrect mounting method

2. During soldering, component covers and holders should leave clearance to avoid placing damaging stress on the LED during soldering.



- 3. The tip of the soldering iron should never touch the lens epoxy.
- 4. Through—hole LEDs are incompatible with reflow soldering.
- 5. If the LED will undergo multiple soldering passes or face other processes where the part may be subjected to intense heat, please check with Kingbright for compatibility.
- 6. Recommended Wave Soldering Profile for Kingbright Thru-Hole Products



NOTES:

- 1. Recommend the wave temperature 245°C $\sim\!260^{\circ}\text{C}.$ The maximum soldering temperature should be less than 260°C.
- 2.Do not apply stress on epoxy resins when temperature is over 85°C.
- 3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
- 4.During wave soldering, the PCB top-surface temperature should be kept below 105°C.
- 5.No more than once.

 SPEC NO: DSAE9386
 REV NO: V.5
 DATE: APR/07/2011
 PAGE: 5 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: J.Yu
 ERP: 1102013557