

Part Number: WP59BL/GYW

Green
Yellow

Features

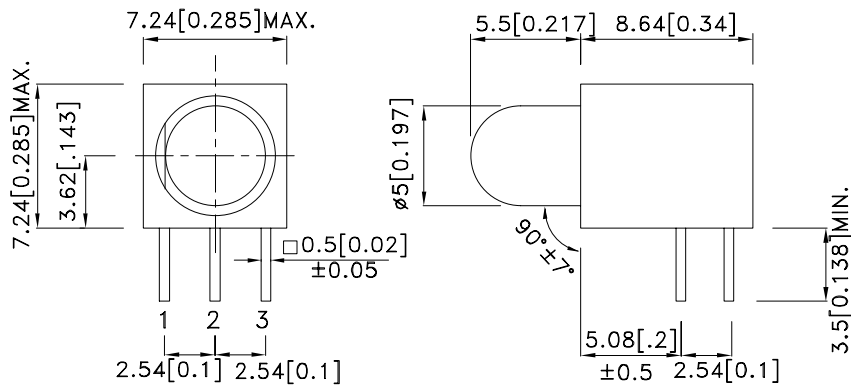
- PRE-TRIMMED LEADS FOR PC BOARD MOUNTING.
- 3 LEADS WITH COMMON CATHODE LEAD.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY - LIFE MEASURED IN YEARS.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- RoHS COMPLIANT.

Description

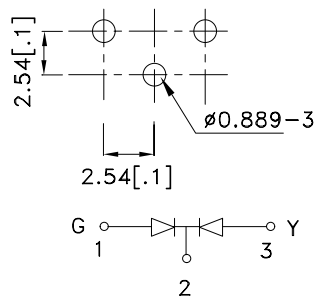
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

Package Dimensions



RECOMMENDED PCB LAYOUT



- 1 ANODE GREEN
- 2 COMMON CATHODE
- 3 ANODE YELLOW

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±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 |
| WP59BL/GYW | Green (GaP) | WHITE DIFFUSED | 18 | 50 | 60° |
| | Yellow (GaAsP/GaP) | | 18 | 40 | |

Notes:

1. θ1/2 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 |
|-----------------------|--------------------------|-----------------|------------|------------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | Green Yellow | 565 590 | | nm | I _F =20mA |
| λ_D [1] | Dominant Wavelength | Green Yellow | 568 588 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Green Yellow | 30 35 | | nm | I _F =20mA |
| C | Capacitance | Green Yellow | 15 20 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | Green Yellow | 2.2 2.1 | 2.5 2.5 | V | I _F =20mA |
| I _R | Reverse Current | Green Yellow | | 10 10 | uA | V _R = 5V |

Notes:

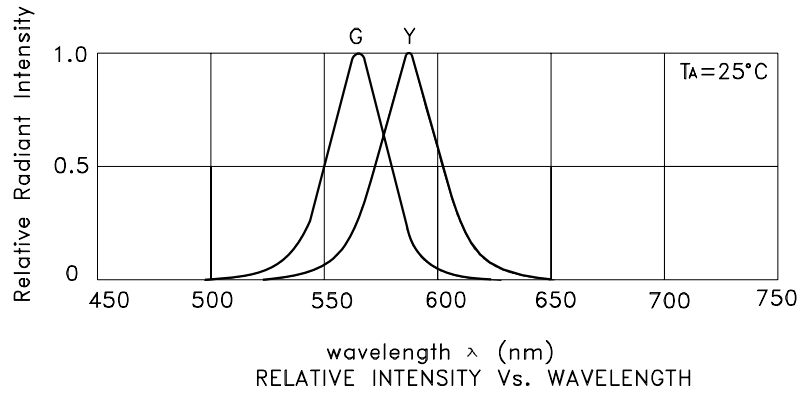
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

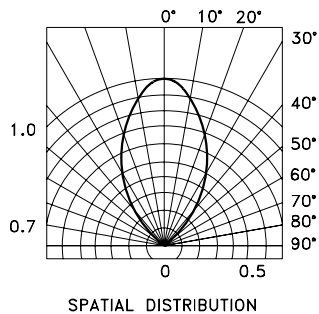
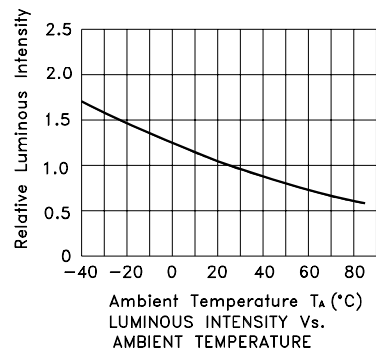
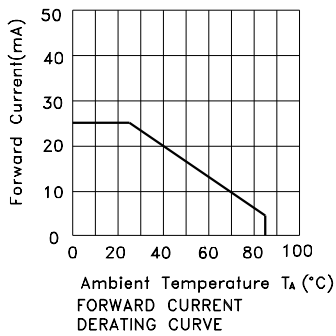
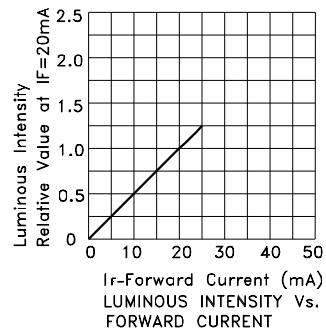
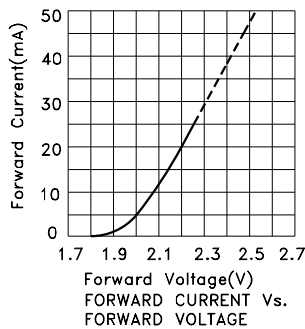
| Parameter | Green | Yellow | Units |
|---------------------------------|---------------------|--------|-------|
| Power dissipation | 62.5 | 75 | mW |
| DC Forward Current | 25 | 30 | mA |
| Peak Forward Current [1] | 140 | 140 | mA |
| Reverse Voltage | 5 | | V |
| Operating / Storage Temperature | -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.

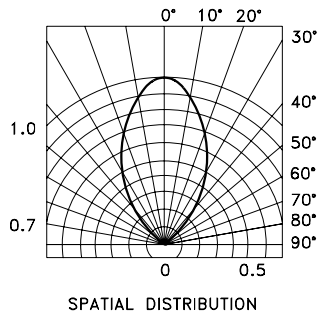
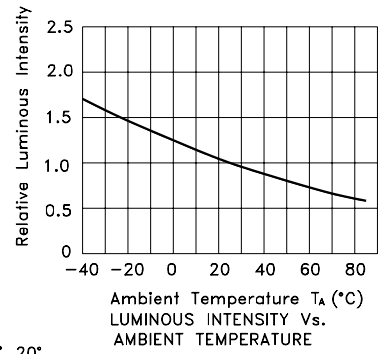
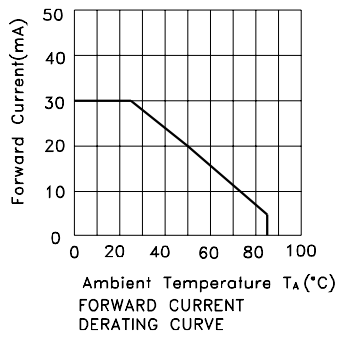
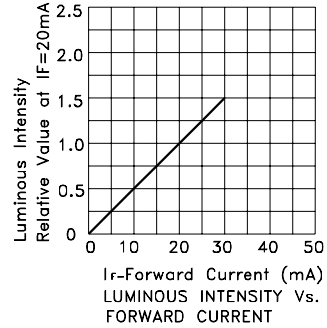
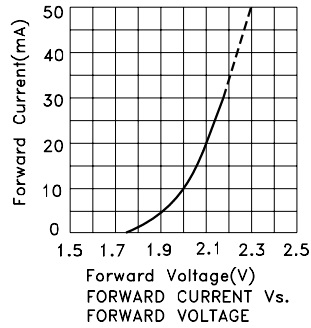


WP59BL/GYW Green



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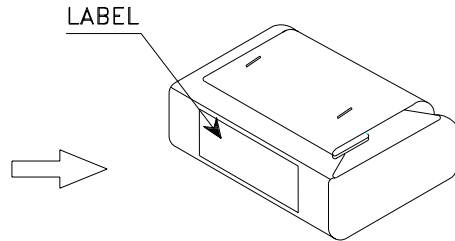
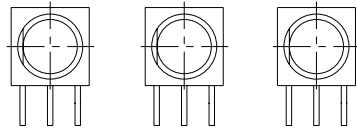
Yellow



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PACKING & LABEL SPECIFICATIONS

WP59BL/GYW

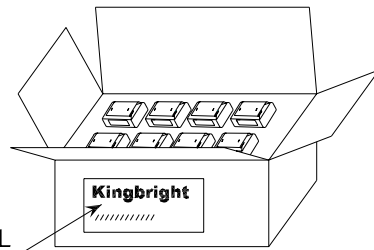
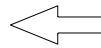


500PCS / BAG




14K / 9# BOX

OUTSIDE LABEL



OUTSIDE LABEL

7K / 5# BOX

| | | | | |
|--|--|----|----------|--------|
| <h1>Kingbright</h1> | | | | |
| Q.C. | <table border="1"> <tr> <td>QC</td> </tr> <tr> <td>XX XX XX</td> </tr> <tr> <td>PASSED</td> </tr> </table> | QC | XX XX XX | PASSED |
| QC | | | | |
| XX XX XX | | | | |
| PASSED | | | | |
| TYPE NO : WP59BLxxx | | | | |
| QUANTITY : 500 pcs | | | | |
| S/N : XX | CODE: XX | | | |
| LOT NO :  | | | | |
| RoHS Compliant | | | | |