

Part Number: WP42WUM/GYW

Green  
Yellow

### Features

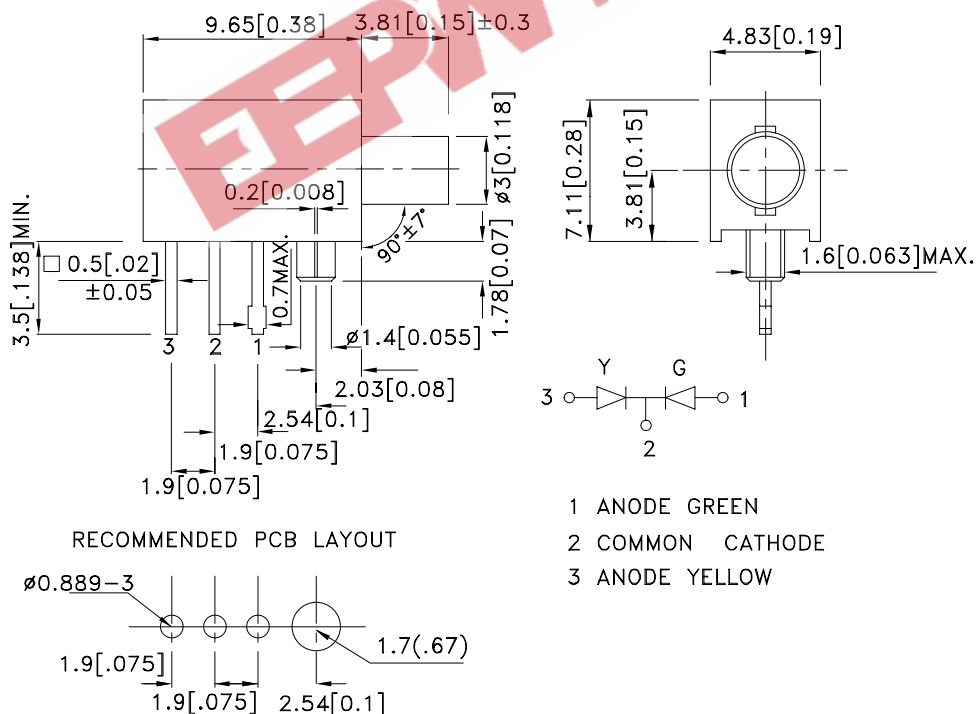
- PRE-TRIMMED LEADS FOR PC MOUNTING.
- I.C.COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY-LIFE MEASURED IN YEARS.
- UL RATING:94V-0.
- HOUSING MATERIAL:TYPE 66 NYLON.
- RoHS COMPLIANT.

### 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



#### Notes:

1. 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.



## Selection Guide

| Part No.    | Dice               | Lens Type      | Iv (mcd) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|-------------|--------------------|----------------|------------------------|------|----------------------|
|             |                    |                | Min.                   | Typ. | 2θ1/2                |
| WP42WUM/GYW | Green (GaP)        | WHITE DIFFUSED | 4                      | 13   | 100°                 |
|             | Yellow (GaAsP/GaP) |                | 2.6                    | 6    |                      |

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 <sub>peak</sub>  | Peak Wavelength          | Green<br>Yellow | 565<br>590 |            | nm    | I <sub>F</sub> =20mA      |
| λ <sub>D</sub> [1] | Dominant Wavelength      | Green<br>Yellow | 568<br>588 |            | nm    | I <sub>F</sub> =20mA      |
| Δλ <sub>1/2</sub>  | Spectral Line Half-width | Green<br>Yellow | 30<br>35   |            | nm    | I <sub>F</sub> =20mA      |
| C                  | Capacitance              | Green<br>Yellow | 15<br>20   |            | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub> [2] | Forward Voltage          | Green<br>Yellow | 2.2<br>2.1 | 2.5<br>2.5 | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>     | Reverse Current          | Green<br>Yellow |            | 10<br>10   | μA    | V <sub>R</sub> = 5V       |

Notes:

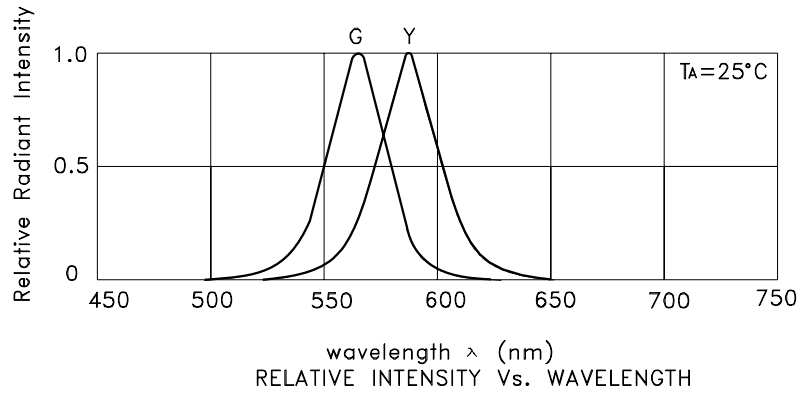
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

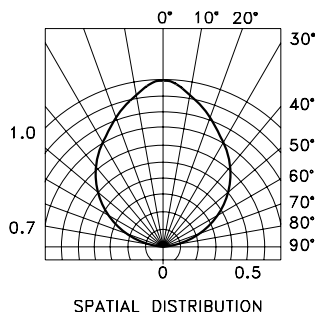
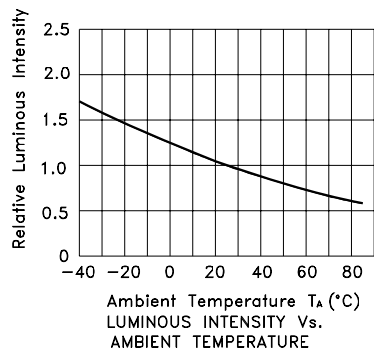
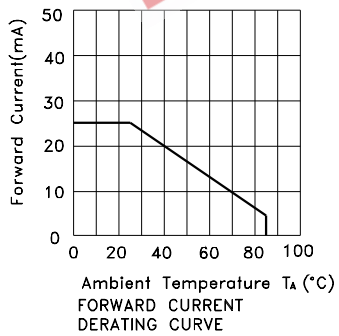
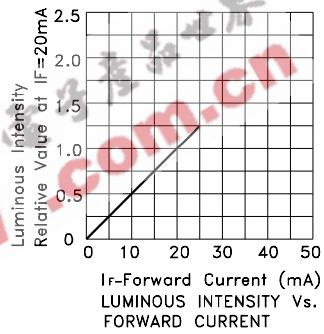
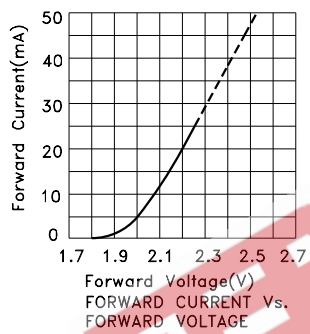
| Parameter                       | Green               | Yellow | Units |
|---------------------------------|---------------------|--------|-------|
| Power dissipation               | 62.5                | 75     | mW    |
| DC Forward Current              | 25                  | 30     | mA    |
| 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.

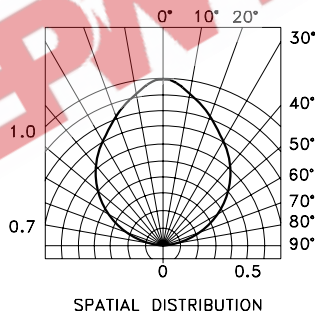
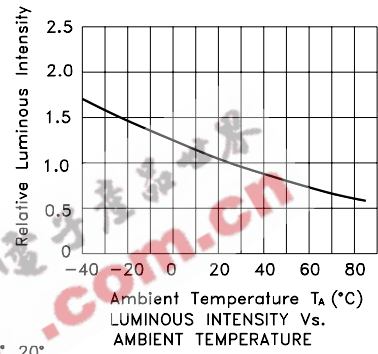
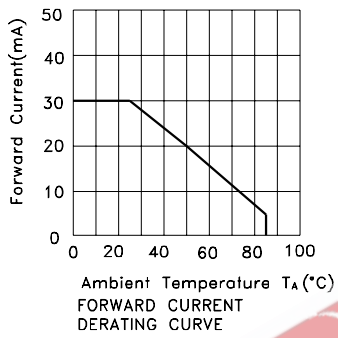
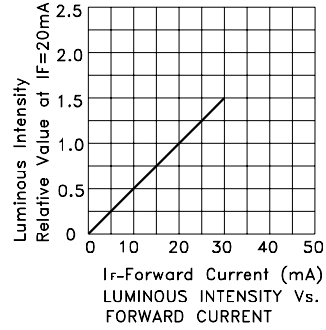
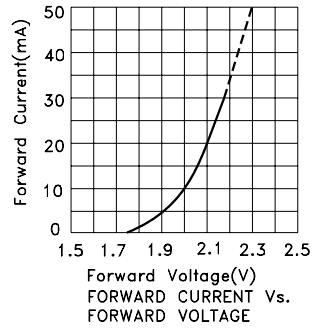


## WP42WUM/GYW Green



# Kingbright

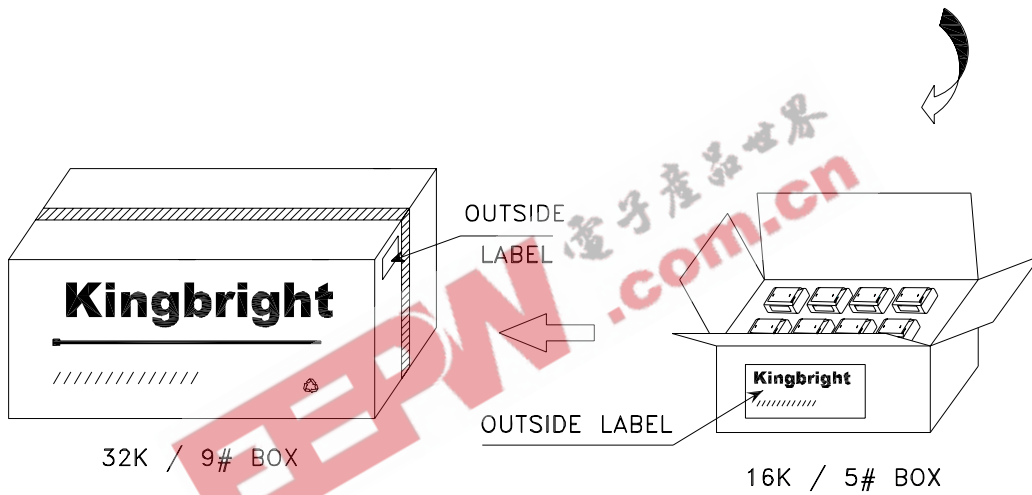
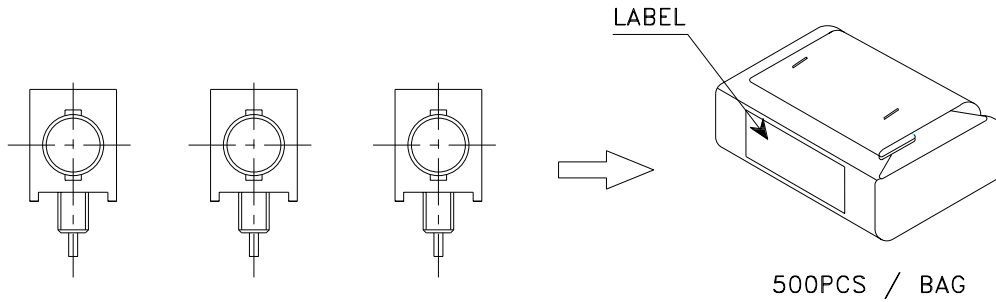
## Yellow




# Kingbright

## PACKING & LABEL SPECIFICATIONS

WP42WUM/GYW



|  |  |    |          |        |
|--|--|----|----------|--------|
| <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 : WP42WUMxxx   |  |    |          |        |
| QUANTITY : 500 pcs   |  |    |          |        |
| S/N : XX   | CODE: XX   |    |          |        |
| LOT NO :  |  |    |          |        |
| RoHS Compliant   |  |    |          |        |