

# Kingbright

## 4.7mm HOUSING FOR LED LAMP WITH WIRE

Part Number: WP1533AA/YD-W152

Yellow

### Features

- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE / LOW CURRENT CAPABILITY.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- RoHS COMPLIANT.

### Description

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

### Package Dimensions

Fig.1 :

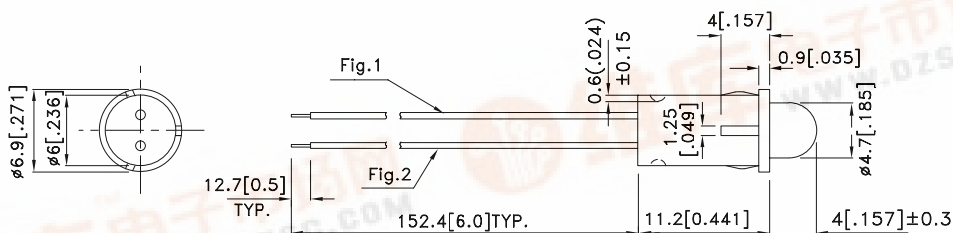
ANODE LEAD :RED INSULATION LEAD ,24 AWG ,UL#1007,Ø1.45mm,  
TIN OVERCOAT WIRE ,STRIP 12.7mm.

Fig. 2 :

CATHODE LEAD :BLACK INSULATION LEAD ,24 AWG,UL#1007 ,Ø1.45mm,  
TIN OVERCOAT WIRE ,STRIP 12.7mm.

Fig.3 :

STAKING TO FIX THE HOLDER AND LED .



#### 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>@ 10mA |      | Viewing<br>Angle [1] |
|------------------|--------------------|-----------------|------------------------|------|----------------------|
|                  |                    |                 | Min.                   | Typ. | 2 $\theta$ 1/2       |
| WP1533AA/YD-W152 | Yellow (GaAsP/GaP) | YELLOW DIFFUSED | 5                      | 18   | 60°                  |

Notes:

1.  $\theta$ 1/2 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           |
|-----------------------|--------------------------|--------|------|------|-------|---------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Yellow | 590  |      | nm    | I <sub>F</sub> =10mA      |
| $\lambda_D$ [1]       | Dominant Wavelength      | Yellow | 588  |      | nm    | I <sub>F</sub> =10mA      |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Yellow | 35   |      | nm    | I <sub>F</sub> =10mA      |
| C                     | Capacitance              | Yellow | 20   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub> [2]    | Forward Voltage          | Yellow | 1.95 | 2.5  | V     | I <sub>F</sub> =10mA      |
| I <sub>R</sub>        | Reverse Current          | Yellow |      | 10   | uA    | V <sub>R</sub> = 5V       |

Notes:

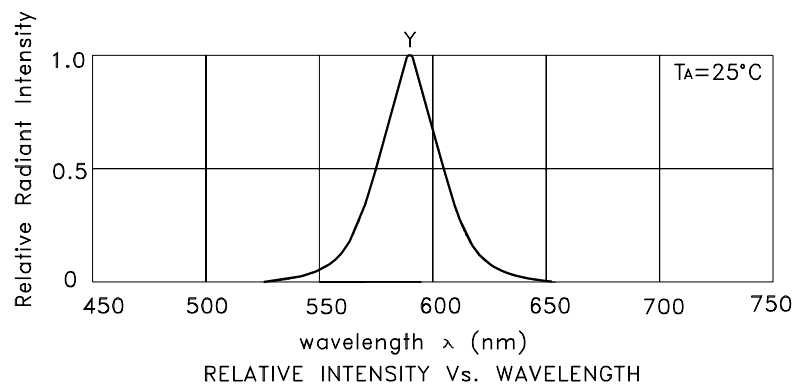
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

| Parameter                     | Yellow              | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 75                  | mW    |
| DC Forward Current            | 30                  | 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 |       |

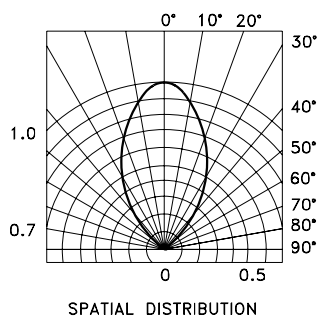
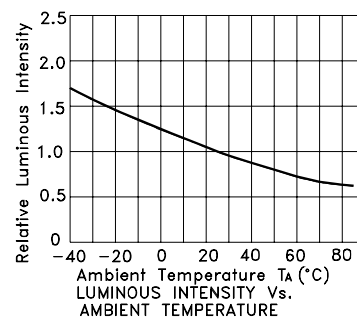
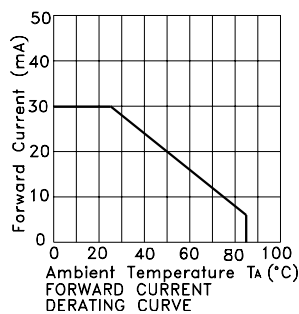
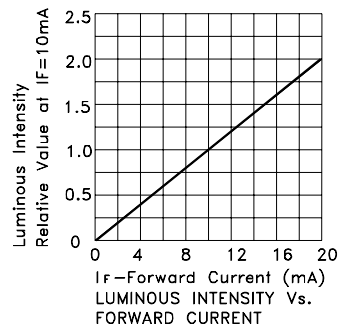
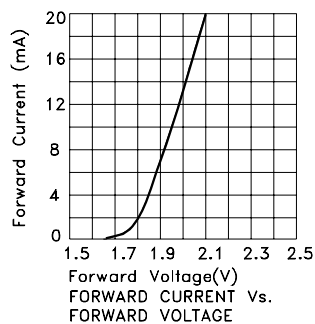
Notes:

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



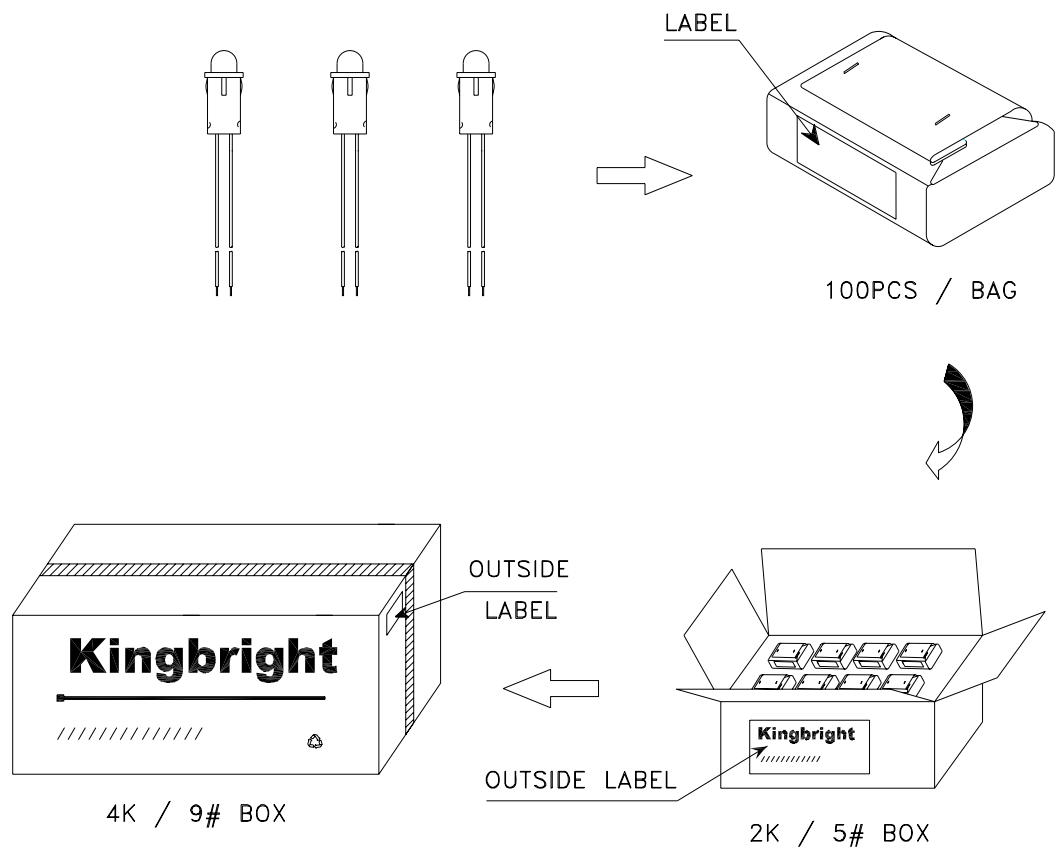
Yellow

WP1533AA/YD-W152



PACKING & LABEL SPECIFICATIONS

WP1533AA/YD-W152



|                                                                                              |          |
|----------------------------------------------------------------------------------------------|----------|
| <b>Kingbright</b>                                                                            |          |
| Q.C.                                                                                         |          |
| TYPE NO : WP1533AAxxx                                                                        |          |
| QUANTITY : 100 pcs                                                                           |          |
| S/N : XX                                                                                     | CODE: XX |
| LOT NO :  |          |
| MADE IN CHINA                                                                                |          |
| RoHS Compliant                                                                               |          |