

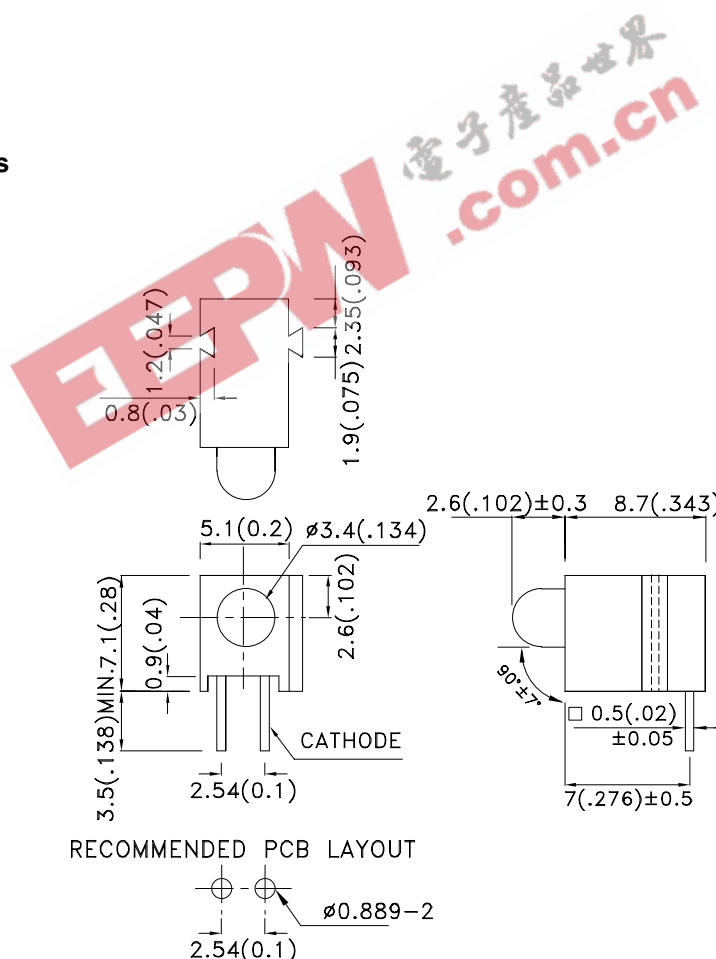
### Features

- PRE-TRIMMED LEADS FOR PC MOUNTING.
- CAN BE ASSEMBLED WITH EACH OTHER.
- 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 High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange 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>@ 10mA |      | Viewing<br>Angle [1] |
|-------------|---------------------------------|--------------|------------------------|------|----------------------|
|             |                                 |              | Min.                   | Typ. | 2θ1/2                |
| WP1384AL/ID | High Efficiency Red (GaAsP/GaP) | RED DIFFUSED | 12                     | 20   | 60°                  |

Notes:

- θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- 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          | High Efficiency Red | 627  |      | nm    | I <sub>F</sub> =20mA      |
| λ <sub>D</sub> [1] | Dominant Wavelength      | High Efficiency Red | 625  |      | nm    | I <sub>F</sub> =20mA      |
| Δλ <sub>1/2</sub>  | Spectral Line Half-width | High Efficiency Red | 45   |      | nm    | I <sub>F</sub> =20mA      |
| C                  | Capacitance              | High Efficiency Red | 15   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub> [2] | Forward Voltage          | High Efficiency Red | 2    | 2.5  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>     | Reverse Current          | High Efficiency Red |      | 10   | uA    | V <sub>R</sub> = 5V       |

Notes:

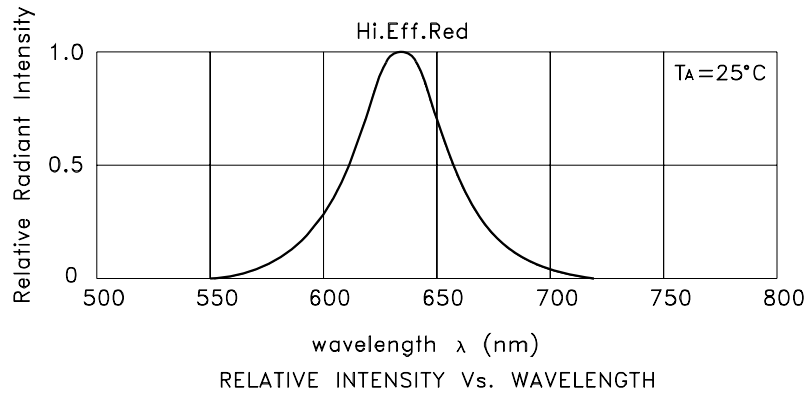
- Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

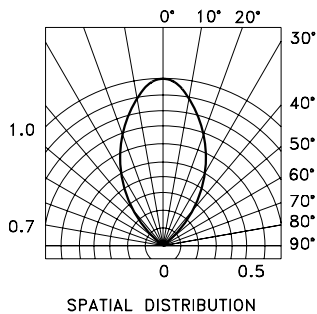
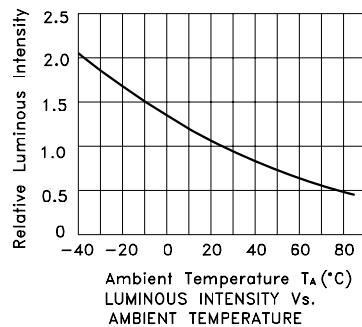
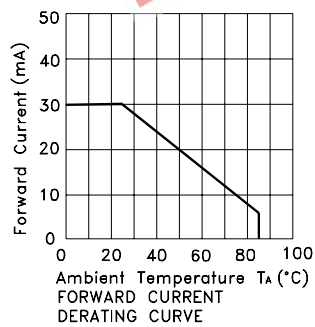
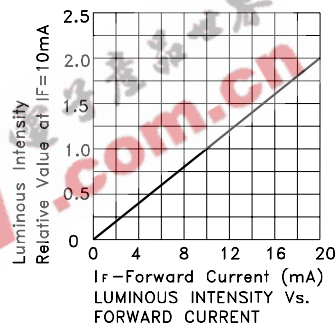
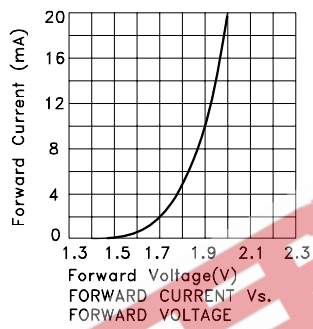
| Parameter                     | High Efficiency Red | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 75                  | mW    |
| DC Forward Current            | 30                  | mA    |
| Peak Forward Current [1]      | 160                 | 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:

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



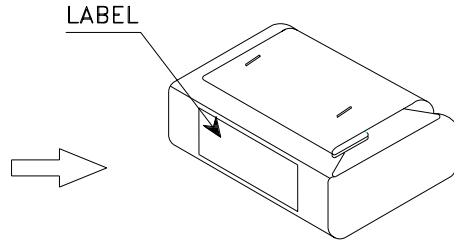
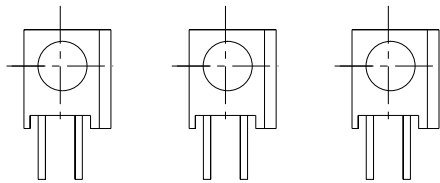
## High Efficiency Red WP1384AL/ID



# Kingbright

## PACKING & LABEL SPECIFICATIONS

WP1384AL/ID

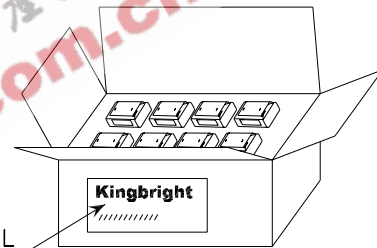


500PCS / BAG




40K / 9# BOX

OUTSIDE LABEL



OUTSIDE LABEL

20K / 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 : WP1384ALxxx  |  |    |          |        |
| QUANTITY : 500 pcs   |  |    |          |        |
| S/N : XX   | CODE: XX   |    |          |        |
| LOT NO :  |  |    |          |        |
| RoHS Compliant   |  |    |          |        |