

# Kingbright

## T-1 (3mm) TRI-LEVEL LED INDICATOR

Part Number: WP934PJ/3ID HIGH EFFICIENCY RED

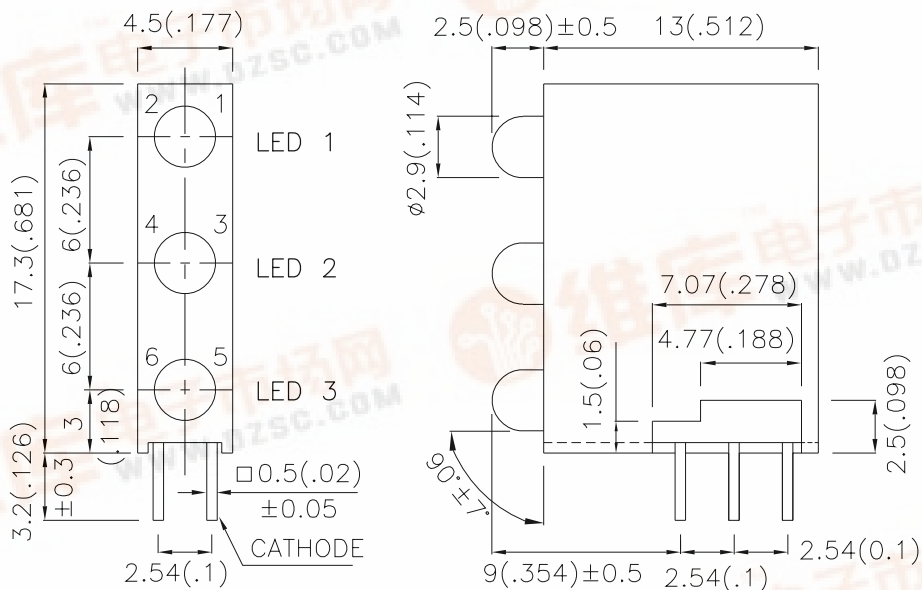
### Features

- TRI-LEVEL DESIGN.
- DIFFERENT COLOR COMBINATION AVAILABLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- RoHS COMPLIANT.

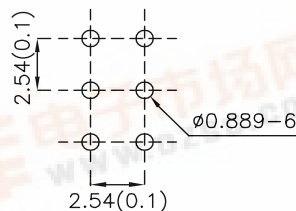
### Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

### Package Dimensions



### RECOMMENDED PCB LAYOUT



### 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       |
| WP934PJ/3ID | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 8                      | 20   | 40°                  |

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          | High Efficiency Red | 627  |      | nm    | IF=20mA         |
| $\lambda_D$ [1]       | Dominant Wavelength      | High Efficiency Red | 625  |      | nm    | IF=20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | High Efficiency Red | 45   |      | nm    | IF=20mA         |
| C                     | Capacitance              | High Efficiency Red | 15   |      | pF    | VF=0V;f=1MHz    |
| VF [2]                | Forward Voltage          | High Efficiency Red | 2.0  | 2.5  | V     | IF=20mA         |
| IR                    | Reverse Current          | High Efficiency Red |      | 10   | uA    | VR = 5V         |

Notes:

1. Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

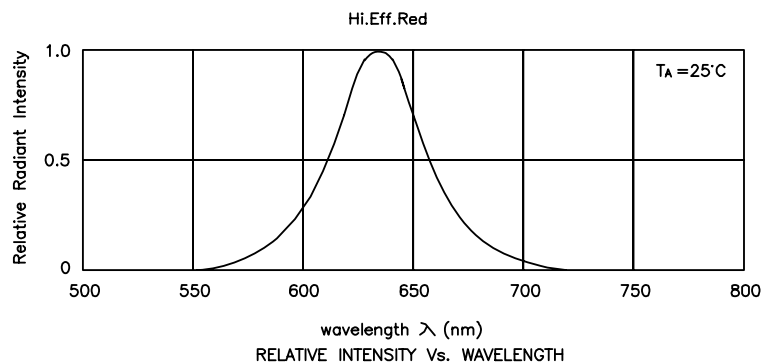
| Parameter                     | High Efficiency Red | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 75                  | mW    |
| DC Forward Current            | 30                  | mA    |
| Peak Forward Current [1]      | 160                 | 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. 1/10 Duty Cycle, 0.1ms Pulse Width.

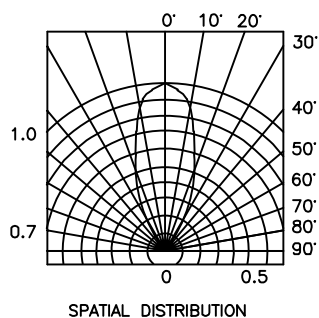
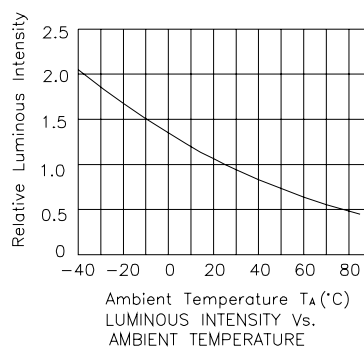
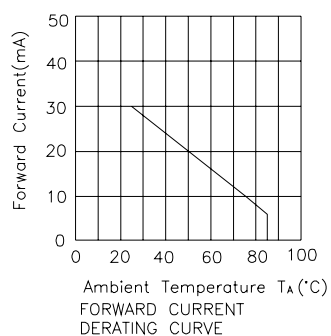
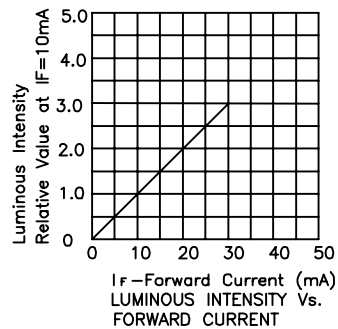
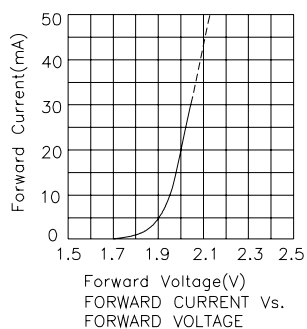
2. 2mm below package base.

3. 5mm below package base.



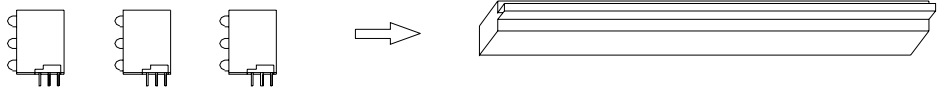
## High Efficiency Red

## WP934PJ/3ID

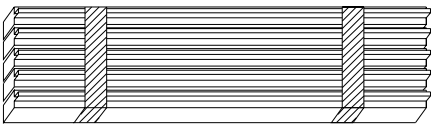


PACKING & LABEL SPECIFICATIONS

WP934PJ/3ID



120PCS / IC TUBE



600pcs / 5pcs IC TUBE



OUTSIDE LABEL

8.4K / 3# BOX

|                                                                                             |           |
|---------------------------------------------------------------------------------------------|-----------|
| <b>Kingbright</b>                                                                           |           |
| Q.C.                                                                                        |           |
| TYPE NO : WP934PJ/XXX                                                                       |           |
| QUANTITY : 600 pcs                                                                          |           |
| S/N : XXX                                                                                   | CODE: XXX |
| LOT NO:  |           |
| MADE IN CHINA                                                                               |           |
| RoHS Compliant                                                                              |           |

