T-1 (3mm) BI-LEVEL LED INDICATOR

WP934CA/2ID-90

HIGH EFFICIENCY RED

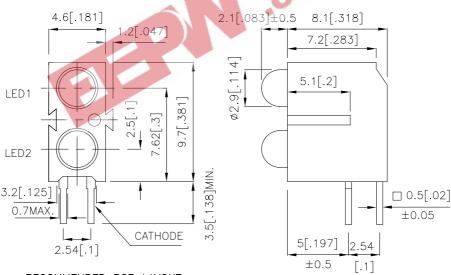
Features

- •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.

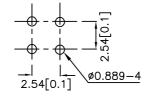
Description

The 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 ±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.

 SPEC NO: DSAF1872
 REV NO: V.1
 DATE: APR/14/2005
 PAGE: 1 OF 3

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: S.H.CHEN
 ERP:1102002509

Kingbright

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 10mA | | Viewing Angle |
|----------------|---------------------------------|--------------|--------------------|------|-----------------------|
| | | , | Min. | Тур. | 2 θ 1/2 |
| WP934CA/2ID-90 | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 8 | 20 | 40° |

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|---------------------|------|------|-------|-----------------|
| λpeak | Peak Wavelength | High Efficiency Red | 627 | | nm | IF=20mA |
| λD | Dominant Wavelength | High Efficiency Red | 625 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | High Efficiency Red | 45 | 400 | nm | IF=20mA |
| С | Capacitance | High Efficiency Red | 15 | - | pF | VF=0V;f=1MHz |
| VF | Forward Voltage | High Efficiency Red | 2.0 | 2.5 | V | IF=20mA |
| lr | Reverse Current | High Efficiency Red | C | 10 | uA | VR = 5V |

Absolute Maximum Ratings at Ta=25°C

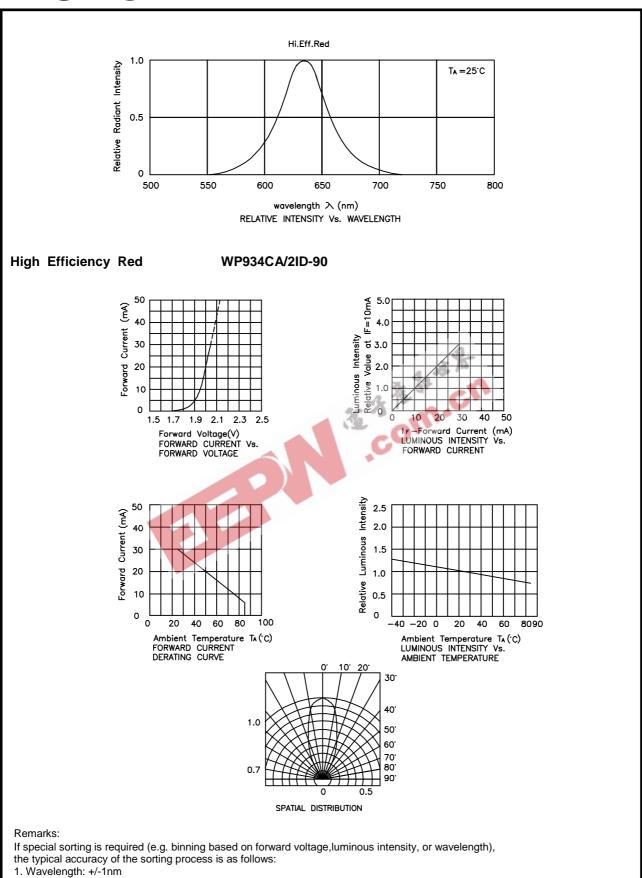
| Parameter | High Efficiency Red | | | |
|-------------------------------|---------------------|----|--|--|
| Power dissipation | 105 | mW | | |
| DC Forward Current | 30 | mA | | |
| Peak Forward Current [1] | 160 | mA | | |
| Reverse Voltage | 5 | V | | |
| Operating/Storage Temperature | -40°C To +85°C | | | |
| Lead Solder Temperature [2] | 260°C For 3 Seconds | | | |
| Lead Solder Temperature [3] | 260°C For 5 Seconds | | | |

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

SPEC NO: DSAF1872 **REV NO: V.1** DATE: APR/14/2005 PAGE: 2 OF 3 APPROVED: J. Lu **CHECKED: Allen Liu** DRAWN: S.H.CHEN ERP:1102002509

^{1.} θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Kingbright



- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

SPEC NO: DSAF1872 **REV NO: V.1** DATE: APR/14/2005 PAGE: 3 OF 3 APPROVED: J. Lu CHECKED: Allen Liu **DRAWN: S.H.CHEN** ERP:1102002509