

T-1 3/4 (5mm) VARIABLE HEIGHT LED BOARD **INDICATOR**

WP7113BR9.52/ID

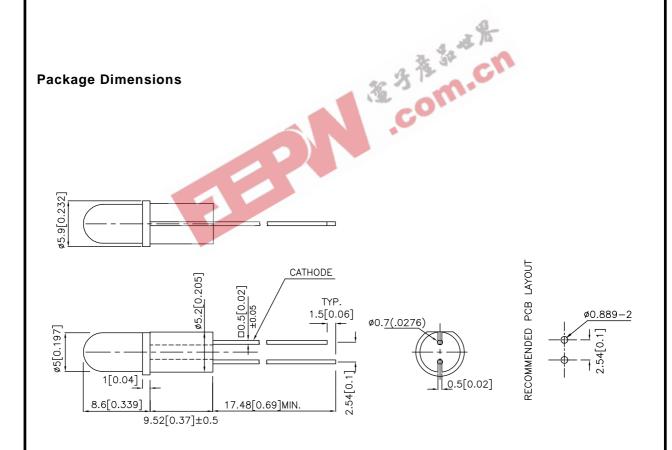
HIGH EFFICIENCY RED

Features

- •LED FIRMLY HELD BY SPACER-NO ADDITIONAL FIXTURING OR GLUEING NECESSARY.
- •SUITABLE FOR BACK PANEL ILLUMINATION, CIRCUIT BOARD INDICATOR, LED INDICATOR.
- •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.



- 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.
- Specifications are subject to change without notice.

SPEC NO: DSAF2108 **REV NO: V.1** APPROVED: J. Lu

CHECKED: Allen Liu

DATE: APR/19/2005 DRAWN: H.Q.YUAN PAGE: 1 OF 4 ERP:1102001516

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Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 10mA | | Viewing Angle |
|-----------------|---------------------------------|--------------|--------------------|----|------------------|
| | | 2. | Min. Typ. | | 2 θ 1/2 |
| WP7113BR9.52/ID | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 8 | 45 | 30° |

Note

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 | 31 | nm nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | High Efficiency Red | 45 | 4.2 | 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 |
| IR | Reverse Current | High Efficiency Red | C | 10 | uA | VR = 5V |

Absolute Maximum Ratings at Ta=25°C

| Parameter | High Efficiency Red | Units | | |
|---|---------------------|---------------------|--|--|
| 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 | 260°C For 3 Seconds | | |
| Lead Solder Temperature [3] 260°C For 5 Seconds | | | | |

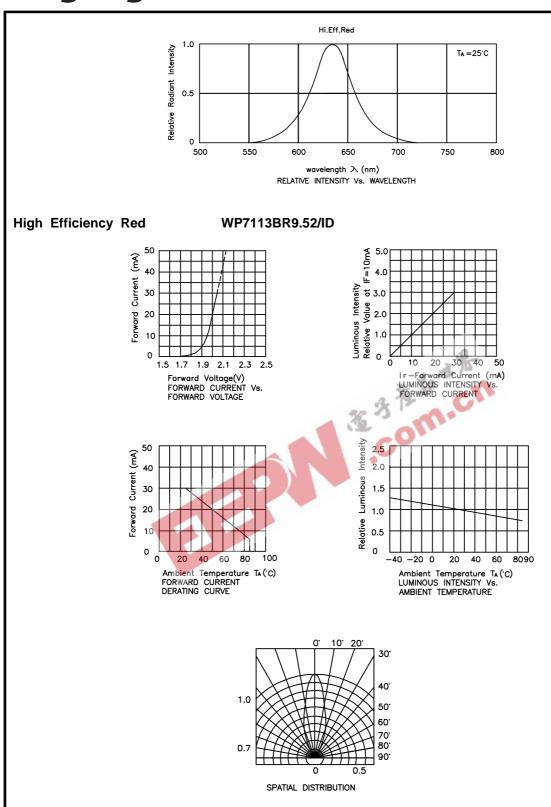
Notes:

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

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

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Remarks:

If special sorting is required (e.g. binning based on forward voltage,luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

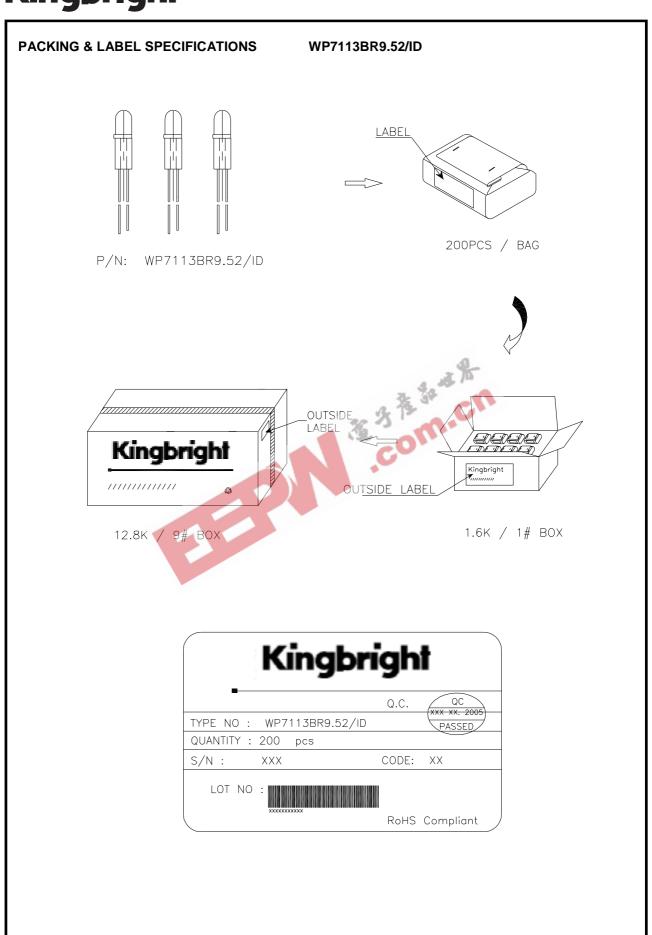
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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