

1.1x3.4mm RECTANGULAR SOLID LAMP

Part Number: WP1004ID

High Efficiency Red

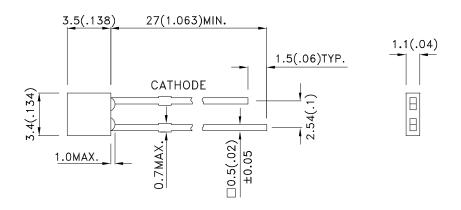
Features

- LOW POWER CONSUMPTION.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- SUITABLE FOR LEVEL INDICATOR.
- LONG LIFE-SOLID STATE RELIABILITY.
- 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



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
- Lead spacing is measured where the leads emerge from the package.
 Specifications are subject to change without notice.





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Selection Guide

| Part No. | Dice | | | d) [2] DmA | Viewing Angle [1] |
|----------|---------------------------------|--------------|------|---------------|----------------------|
| | | | Min. | Тур. | 201/2 |
| WP1004ID | High Efficiency Red (GaAsP/GaP) | RED DIFFUSED | 5 | 12 | 100° |

- 1. 01/2 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

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

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

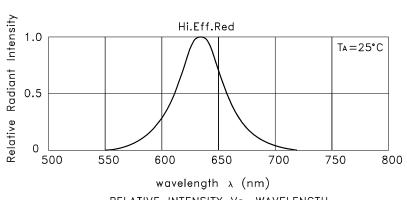
Absolute Maximum Ratings at TA=25°C

| 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 | | | |

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

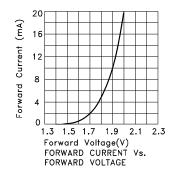
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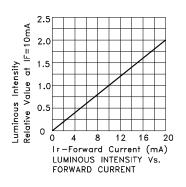
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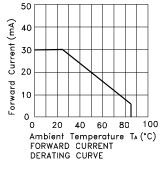


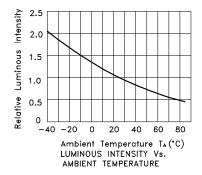
RELATIVE INTENSITY Vs. WAVELENGTH

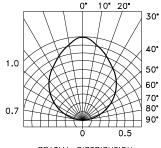
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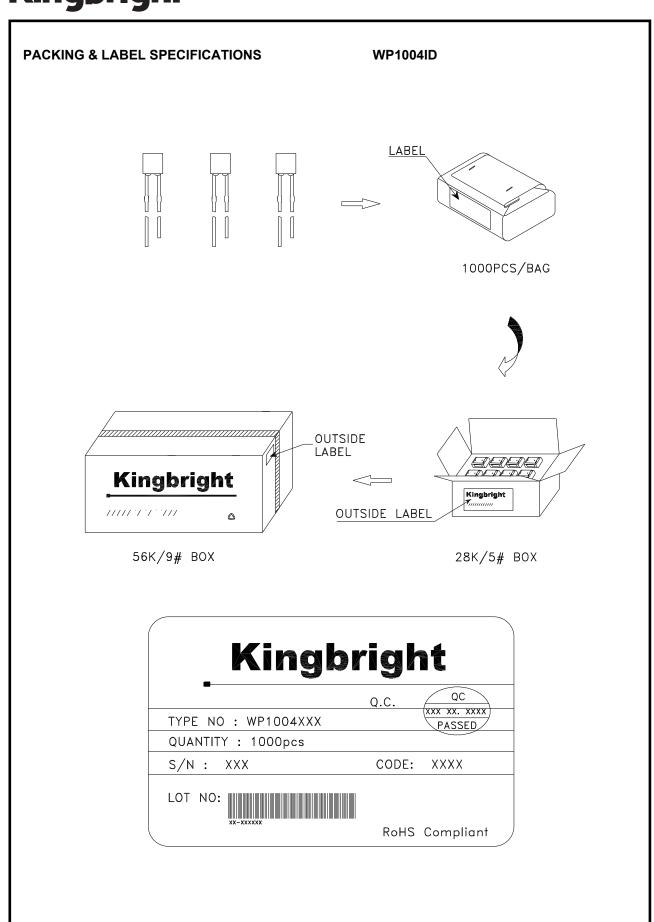


SPATIAL DISTRIBUTION

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