

8mm ROUND LED LAMP

WP793ID

HIGH EFFICIENCY RED

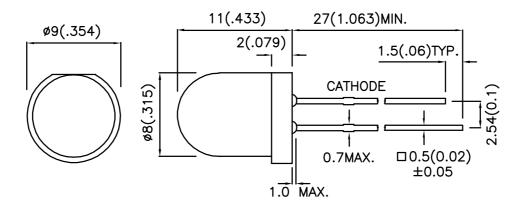
Features

- •8mm DIAMETER BIG LAMP.
- •WIDE VIEWING ANGLE.
- •I.C.COMPATIBLE.
- •RELIABLE AND RUGGED.
- •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



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.

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 REV NO: V.1
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 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: S.H.CHEN
 ERP:1101007305

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Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20mA | | Viewing Angle |
|----------|---------------------------------|--------------|--------------------|------|-----------------------|
| | | | Min. | Тур. | 2 θ 1/2 |
| WP793ID | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 36 | 100 | 60° |

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 | | 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 | Forward Voltage | High Efficiency Red | 2.0 | 2.5 | V | IF=20mA |
| lr | Reverse Current | High Efficiency Red | | 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 | | |
| ead Solder Temperature [2] 260°C For 3 Seconds | | | |
| Lead Solder Temperature [3] 260°C For 5 Seconds | | | |

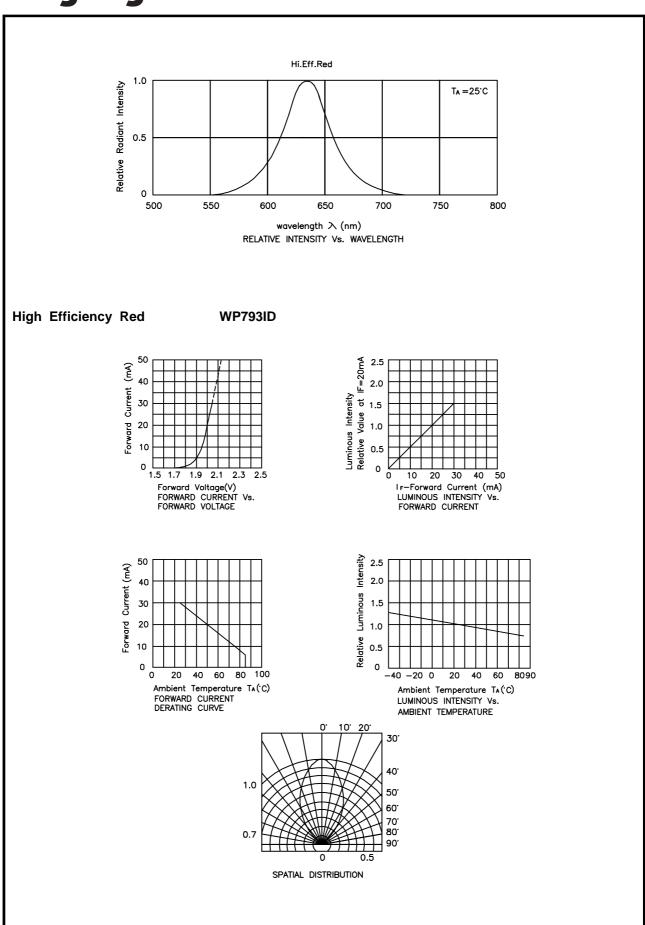
Notes:

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

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

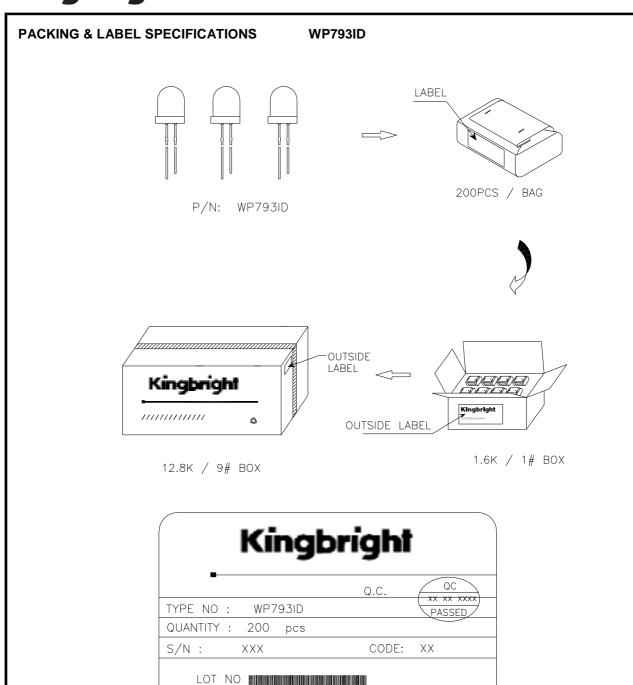
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Remarks:

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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RoHS Compliant