

## 8mm ROUND LED LAMP

WP793ID

HIGH EFFICIENCY RED

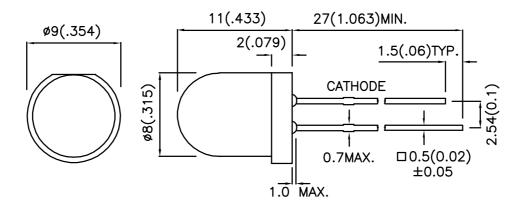
## **Features**

- •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.

 SPEC NO: DSAF2465
 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.	<b>2</b> θ <b>1/2</b>
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
IR	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			
Lead Solder Temperature [2]	ead Solder Temperature [2] 260°C For 3 Seconds			
Lead Solder Temperature [3]	ad Solder Temperature [3] 260°C For 5 Seconds			

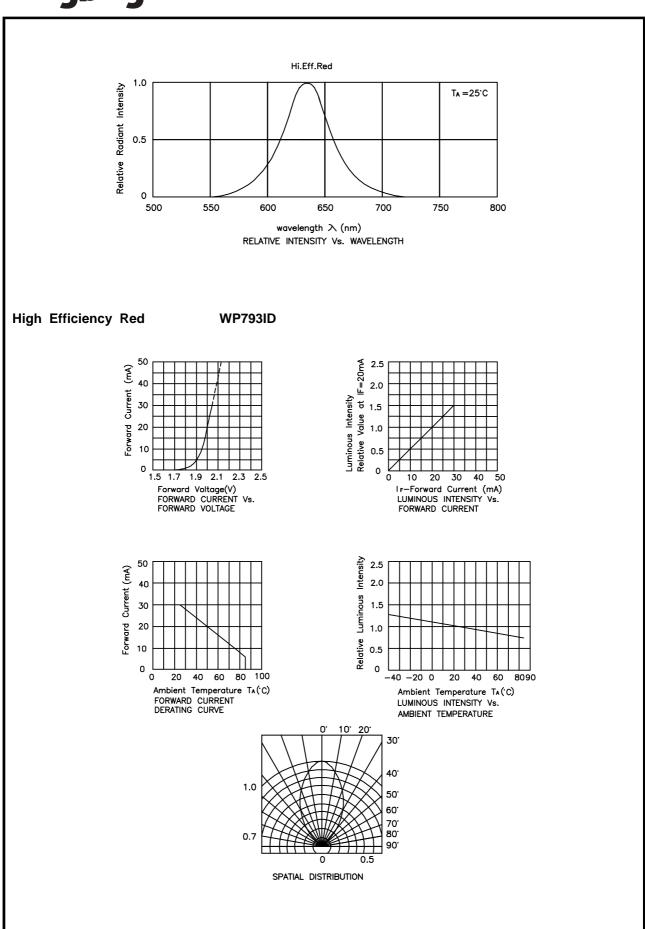
## Notes:

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

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 $<sup>1. \</sup>theta 1/2$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

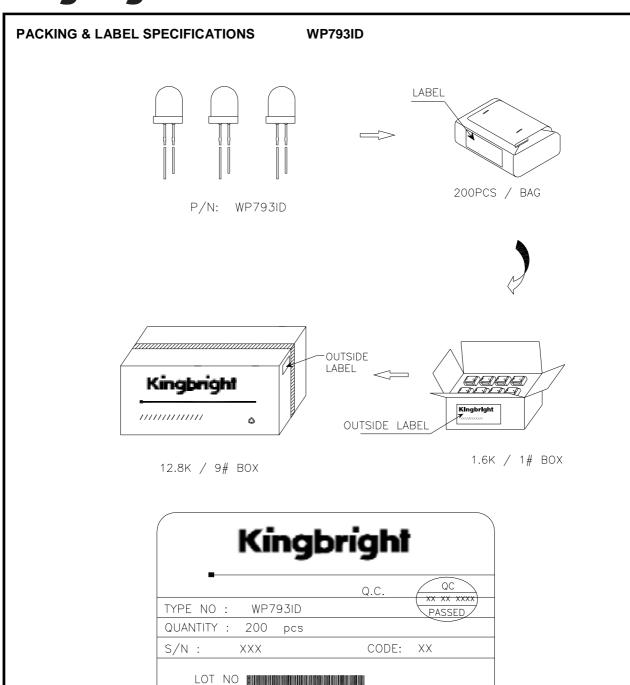
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### Remarks:

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