

### 1.8mm SOLID STATE LAMP

WP1060ID

HIGH EFFICIENCY RED

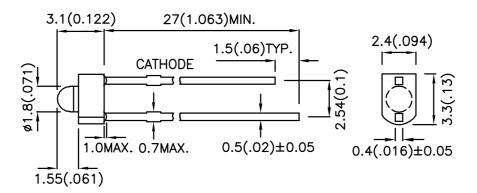
#### **Features**

- •1.8mm DIAMETER SMALL SIZE LED LAMP.
- •ULTRA BRIGHTNESS IS AVAILABLE.
- •RELIABLE AND RUGGED.
- •VERSATILE MOUNTING ON P.C. BOARD OR PANEL.
- •AVAILABLE IN DIFFUSED LENS.
- •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

- 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: DSAF2116 REV NO: V.1 DATE: APR/11/2005
APPROVED: J. Lu CHECKED: Allen Liu DRAWN:W.J.ZHU

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# **Kingbright**

## **Selection Guide**

	Part No.	Dice	Lens Type	Iv (mcd) @ 10mA		Viewing Angle
				Min.	Тур.	2 θ 1/2
	WP1060ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	15	70°

#### 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			
Lead Solder Temperature [2]	260°C For 3 Seconds			
Lead Solder Temperature [3]	260°C For 5 Seconds			

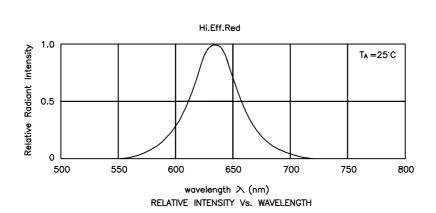
#### Notes:

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

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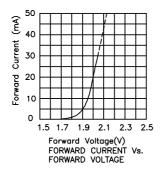
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

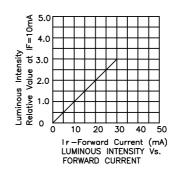
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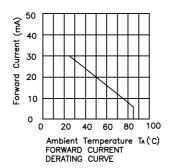


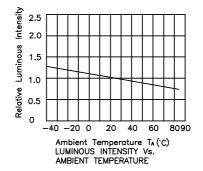
# High Efficiency Red

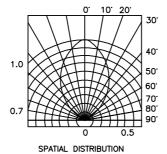
#### WP1060ID











#### 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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