

Part Number: L-816BID

HIGH EFFICIENCY RED

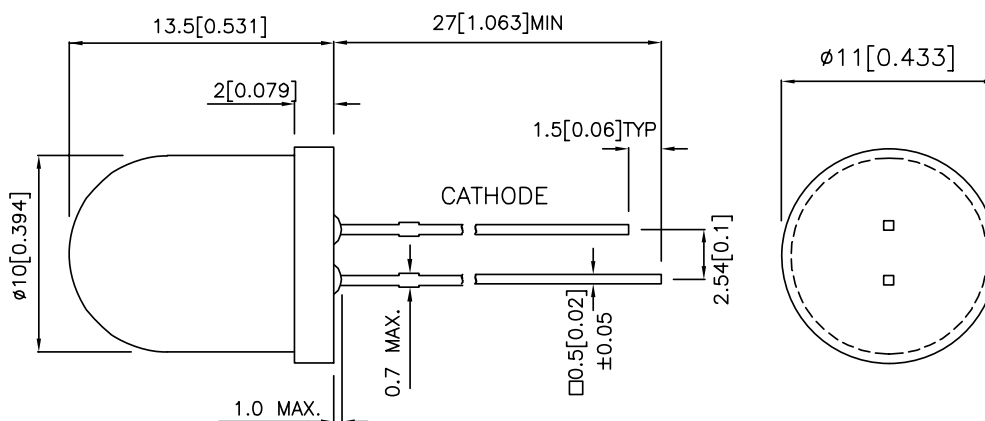
### Features

- 10mm DIAMETER BIG LAMP WITH BUILT-IN BLINKING IC.
- OPERATION VOLTAGE FROM 3.5V to 14V.
- BLINKING FREQUENCY FROM 3.0Hz to 1.5Hz.
- 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 lead emerge from the package.
4. Specifications are subject to change without notice.



## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) V=9V		Viewing Angle
			Min.	Typ.	2θ1/2
L-816BID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	18	60	60°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Min.	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red		627		nm	
λ <sub>D</sub>	Dominant Wavelength	High Efficiency Red		625		nm	
Δλ <sub>1/2</sub>	Spectral Line Half-width	High Efficiency Red		45		nm	
I <sub>F</sub>	Forward Current	High Efficiency Red	8	22		mA	Min:V <sub>F</sub> =3.5V Typ:V <sub>F</sub> =5V
I <sub>SON</sub>	Supply Current	High Efficiency Red		8		mA	V <sub>F</sub> = 3.5V
I <sub>SON</sub>	Supply Current	High Efficiency Red		44		mA	V <sub>F</sub> = 14V
f	Blink Frequency	High Efficiency Red	1.5		3	Hz	V <sub>F</sub> = 3.5V~14V

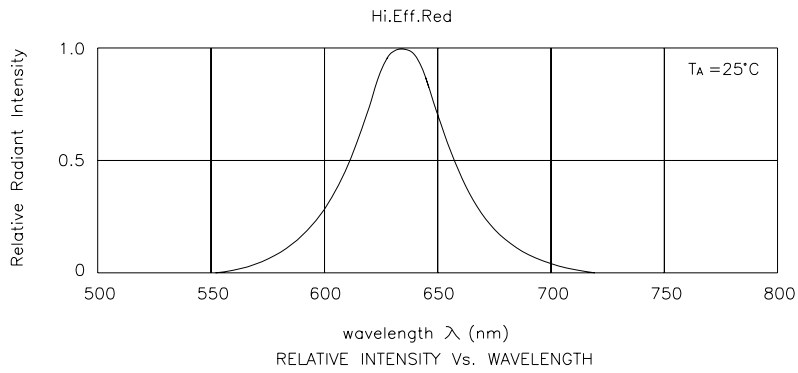
## Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red	Units
Power dissipation	310	mW
Forward Voltage	14	V
Reverse Voltage	0.5	V
Operating Temperature	-40°C To +70°C	
Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [1]	260°C For 3 Seconds	
Lead Solder Temperature [2]	260°C For 5 Seconds	

Notes:

1. 2mm below package base.

2. 5mm below package base.



## High Efficiency Red

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