

Features

- 10mm DIAMETER BIG LAMP WITH BULIT-IN BLINKING IC.
- OPERATION VOLTAGE FROM 3.5V to 13V.
- BLINKING FREQUENCY FROM 2.5Hz to 1.5Hz.

L816BID HIGH EFFICIENCY RED

L816BGD GREEN

L816BYD YELLOW

L816BSRC/B SUPER BRIGHT RED

L816BSRD/B SUPER BRIGHT RED

Description

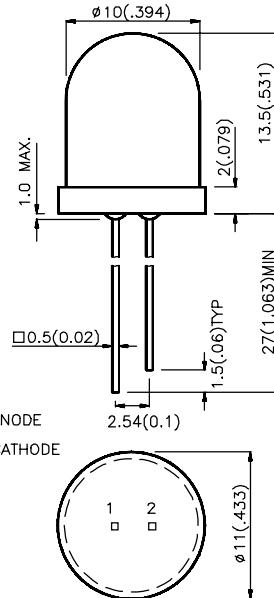
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red 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 package.
4. Specifications are subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ VF=9V		Viewing Angle 2θ1/2
			Min.	Typ.	
L816BID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	20	60	60°
L816BGD	GREEN (GaP)	GREEN DIFFUSED	20	50	60°
L816BYD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	20	40	60°
L816BSRD/B	SUPER BRIGHT RED (GaAlAs)	RED DIFFUSED	100	300	60°
L816BSRC/B	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	500	800	40°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. * Luminous intensity with asterisk is measured at 20mA.

Electrical / Optical Characteristics at $T_A=25^\circ C$

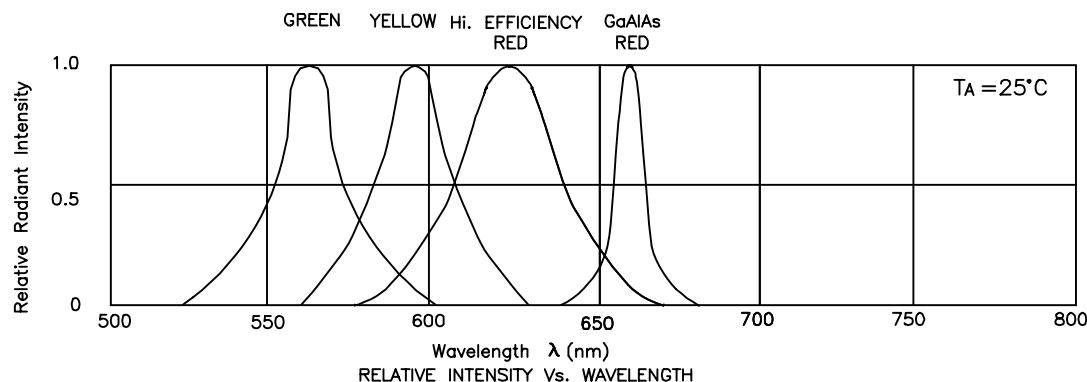
Symbol	Parameter	Device	Min.	Typ.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Green Yellow Super Bright Red		625 565 590 660	nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	High Efficiency Red Green Yellow Super Bright Red		45 30 35 20	nm	IF=20mA
V_F	Forward Voltage	All	3.5	9-12	V	Min. IF=6mA Typ. IF=38-56mA
I_{SON}	Supply Current	All		6 -70	mA	
f	Blink Frequency	All		2.5-1.5	Hz	

Absolute Maximum Ratings at $T_A=25^\circ C$

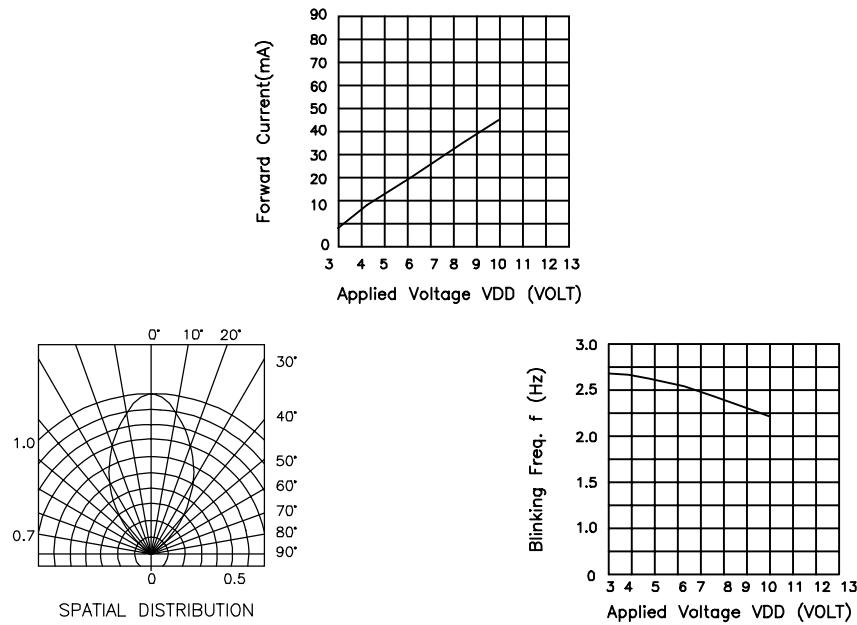
Parameter	High Efficiency Red	Green	Yellow	Super Bright Red	Units
Power dissipation	200	200	200	200	mW
DC Forward Current	38-56	38-56	38-56	38-56	mA
Reverse Voltage	0.5	0.5	0.5	0.5	V
Operating Temperature			-40°C To +70°C		
Storage Temperature			-50°C To +100°C		
Lead Soldering Temperature [1]			260°C For 5 Seconds		

Notes:

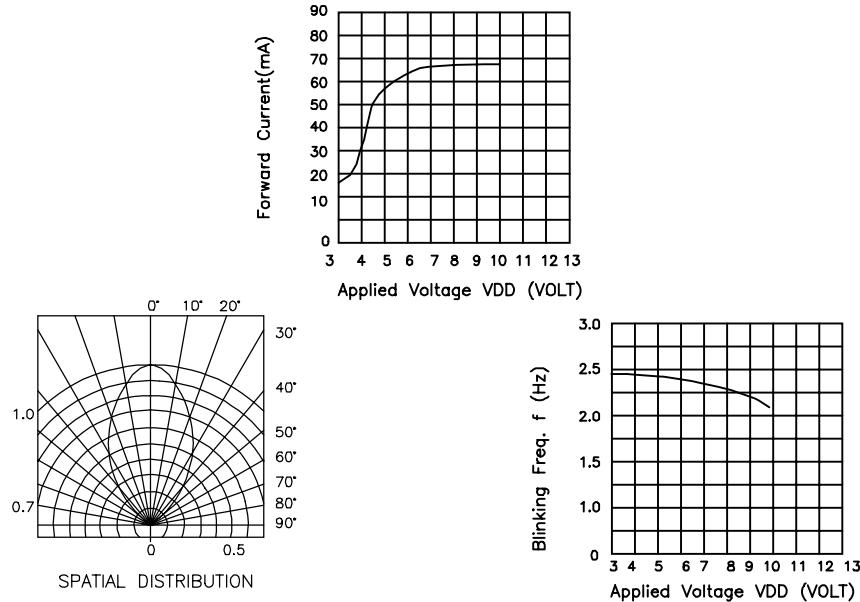
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



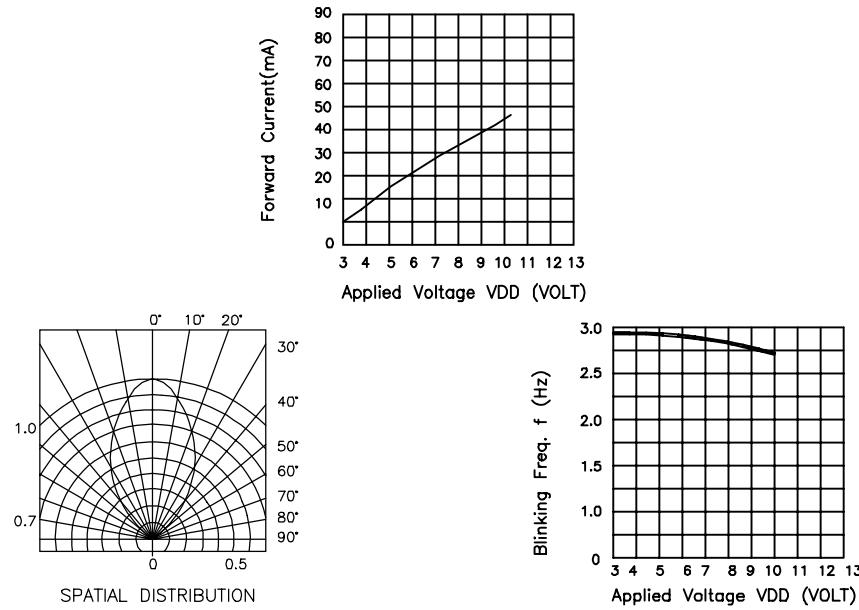
High Efficiency Red L816BID



Green L816BGD



Yellow L816BYD



Super Bright Red L816BSRD/B,L816SRC/B

