

L-934EW/1ID	HIGH EFFICIENCY RED
L-934EW/1SRD	SUPER BRIGHT RED
L-934EW/1YD	YELLOW
L-934EW/1GD	GREEN

### Features

- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.

### Description

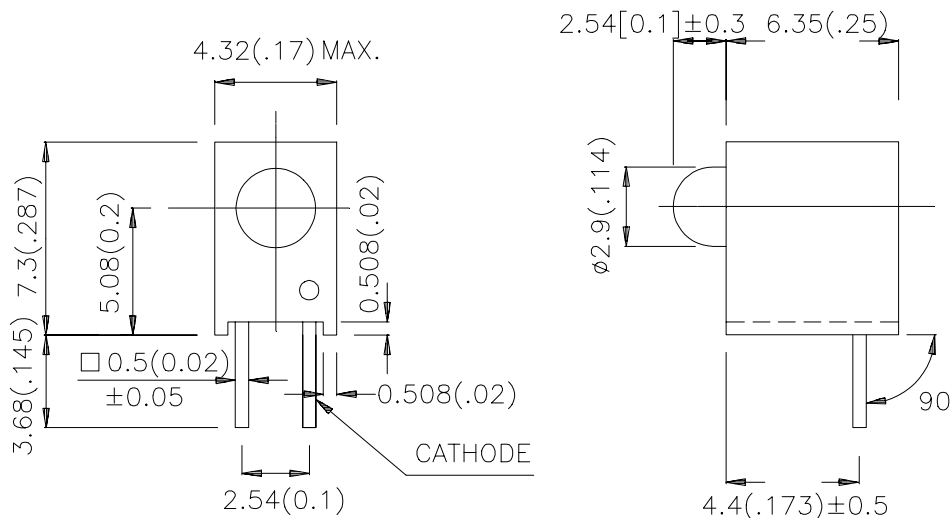
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

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

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

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10mA*20mA		Viewing Angle
			Min.	Typ.	2θ1/2
L-934EW/1ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	20	60°
L-934EW/1SRD	SUPER BRIGHT RED (GaAlAs)	RED DIFFUSED	*110	*300	60°
L-934EW/1YD	YELLOW(GaAsP/GaP)	YELLOW DIFFUSED	5	15	60°
L-934EW/1GD	GREEN (GaP)	GREEN DIFFUSED	8	20	60°

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<sub>A</sub>=25°C

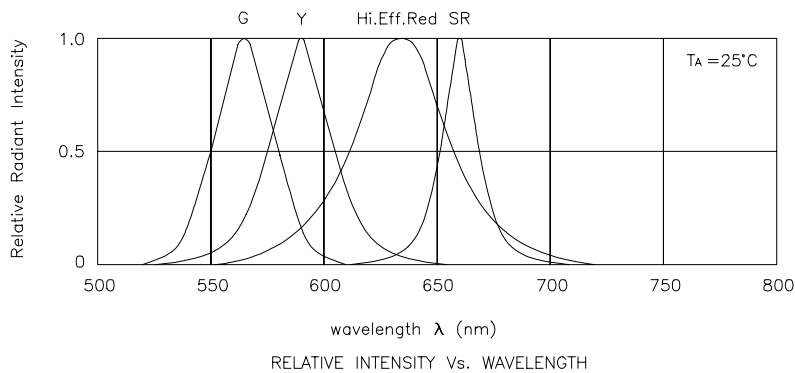
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red Super Bright Red Yellow Green	627 660 590 565		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominate Wavelength	High Efficiency Red Super Bright Red Yellow Green	625 640 588 568		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	High Efficiency Red Super Bright Red Yellow Green	45 20 35 30		nm	I <sub>F</sub> =20mA
C	Capacitance	High Efficiency Red Super Bright Red Yellow Green	15 45 20 15		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	High Efficiency Red Super Bright Red Yellow Green	2.0 1.85 2.1 2.2	2.5 2.5 2.5 2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	All		10	uA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

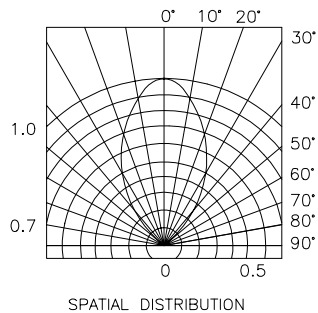
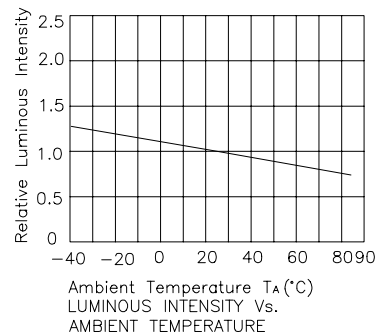
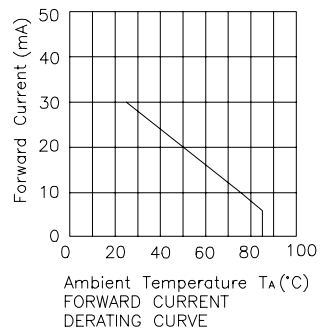
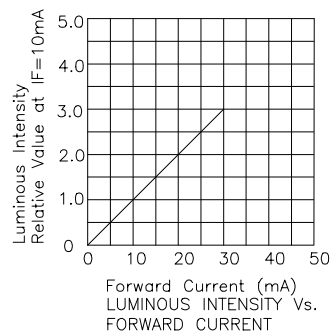
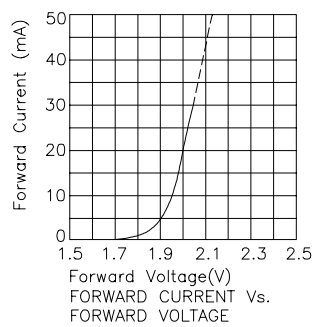
Parameter	High Efficiency Red	Super Bright Red	Yellow	Green	Units
Power dissipation	105	100	105	105	mW
DC Forward Current	30	30	30	25	mA
Peak Forward Current [1]	160	155	140	140	mA
Reverse Voltage	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C				
Lead Solder Temperature [2]	260°C For 5 Seconds				

Notes:

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

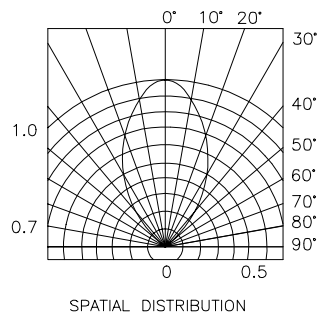
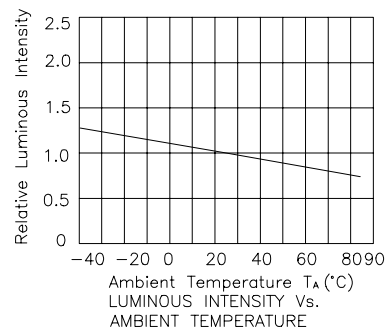
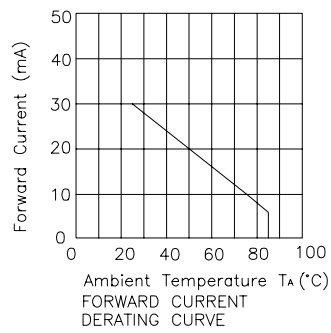
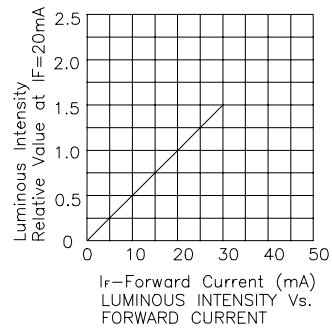
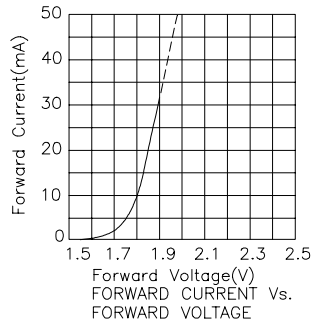


## High Efficiency Red L-934EW/1ID



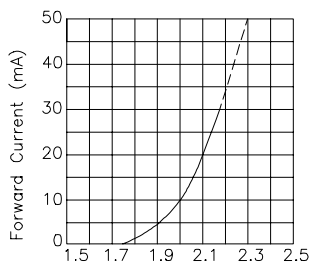
## Super Bright Red

## L-934EW/1SRD

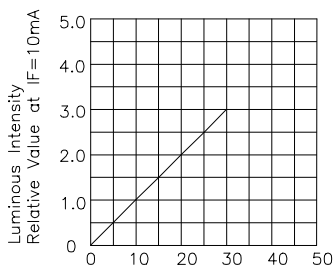


Yellow

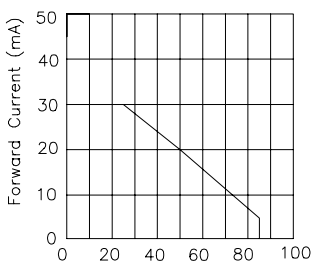
L-934EW/1YD



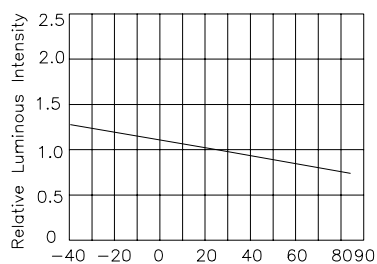
Forward Voltage(V)  
FORWARD CURRENT Vs.  
FORWARD VOLTAGE



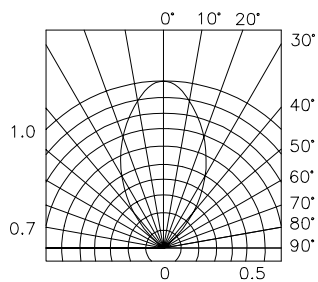
Forward Current (mA)  
LUMINOUS INTENSITY Vs.  
FORWARD CURRENT



Ambient Temperature  $T_A$ (°C)  
FORWARD CURRENT  
DERATING CURVE



Ambient Temperature  $T_A$ (°C)  
LUMINOUS INTENSITY Vs.  
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

**Green L-934EW/1GD**

