

L-934HD BRIGHT RED	L-934Gx GREEN
L-934Ix HIGH EFFICIENCY RED	L-934Yx YELLOW
L-934EC HIGH EFFICIENCY RED	L-934ED ORANGE
L-934Nx PURE ORANGE	L-934PGx PURE GREEN

### Features

- HIGH INTENSITY.
- LOW POWER CONSUMPTION.
- POPULAR T-1 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.

### Description

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

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

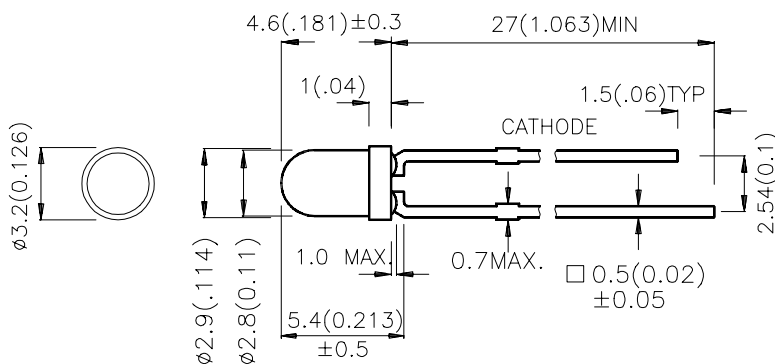
The High Efficiency Red and Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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

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

The Pure Green source color devices are made with Gallium Phosphide Pure Green 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 subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10 mA		Viewing Angle
			Min.	Typ.	
L-934HD	BRIGHT RED (GaP)	RED DIFFUSED	1	3	60°
L-934ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	25	60°
L-934IT		RED TRANS.	20	60	50°
L-934EC		WATER CLEAR	20	60	50°
L-934ED	ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	8	20	60°
L-934GD	GREEN (GaP)	GREEN DIFFUSED	8	20	60°
L-934GT		GREEN TRANS.	20	60	50°
L-934GC		WATER CLEAR	20	60	50°
L-934YD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	5	15	60°
L-934YT		YELLOW TRANS.	8	20	50°
L-934YC		WATER CLEAR	8	20	50°
L-934ND	PURE ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	8	30	60°
L-934NT		ORANGE TRANS.	20	50	50°
L-934NC		WATER CLEAR	20	50	50°
L-934PGD	PURE GREEN (GaP)	GREEN DIFFUSED	2	5	60°
L-934PGT		GREEN TRANS.	3	15	50°
L-934PGC		WATER CLEAR	3	15	50°

Note:

1.  $\theta_{1/2}$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

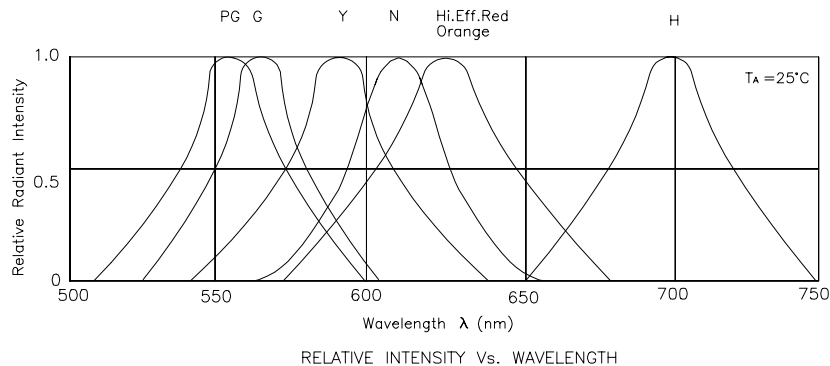
Parameter	Bright Red	High Efficiency Red	Orange	Green	Yellow	Pure Orange	Pure Green	Units
Power dissipation	120	105	105	105	105	105	105	mW
DC Forward Current	25	30	30	25	30	30	25	mA
Peak Forward Current [1]	120	160	160	140	140	145	135	mA
Reverse Voltage	5	5	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C							
Lead Soldering Temperature [2]	260°C For 5 Seconds							

Notes:

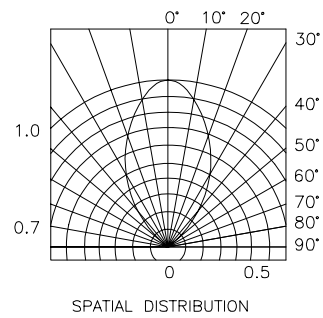
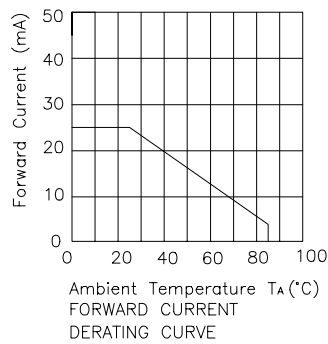
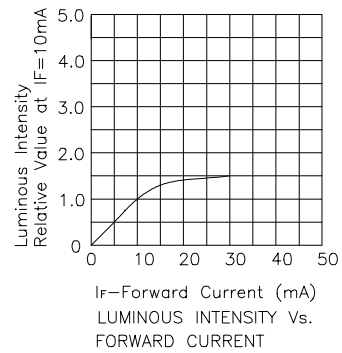
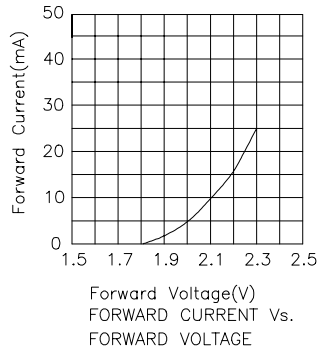
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

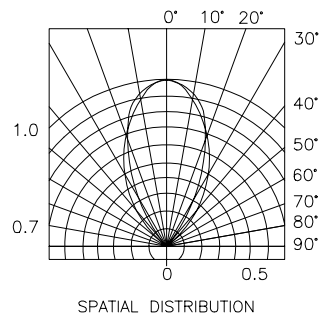
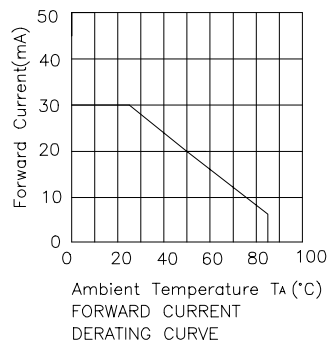
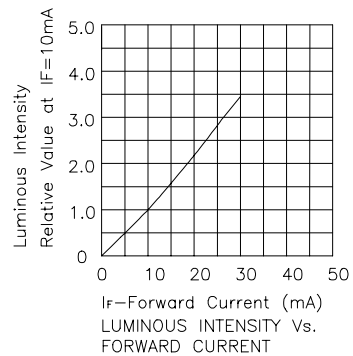
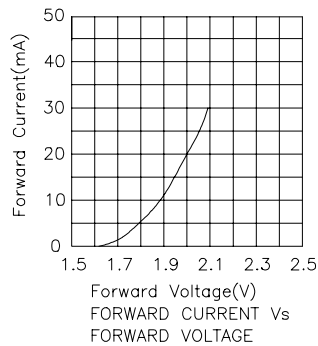
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Bright Red High Efficiency Red Orange Green Yellow Pure Orange Pure Green	700 627 627 565 590 607 555		nm	IF=20mA
$\lambda_D$	Dominate Wavelength	Bright Red High Efficiency Red Orange Green Yellow Pure Orange Pure Green	660 625 625 568 588 610 555		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Bright Red High Efficiency Red Orange Green Yellow Pure Orange Pure Green	45 45 45 30 35 35 30		nm	IF=20mA
C	Capacitance	Bright Red High Efficiency Red Orange Green Yellow Pure Orange Pure Green	40 15 15 15 20 15 45		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Bright Red High Efficiency Red Orange Green Yellow Pure Orange Pure Green	2.25 2.0 2.0 2.2 2.1 2.05 2.25	2.5 2.5 2.5 2.5 2.5 2.5 2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V



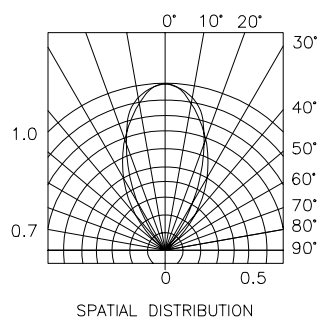
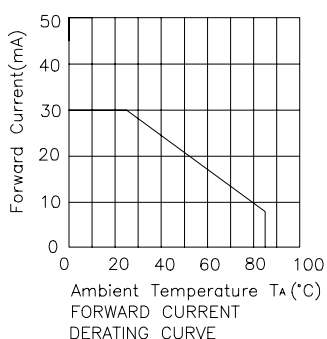
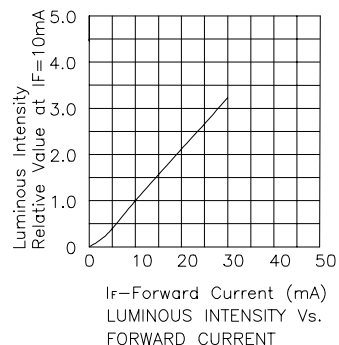
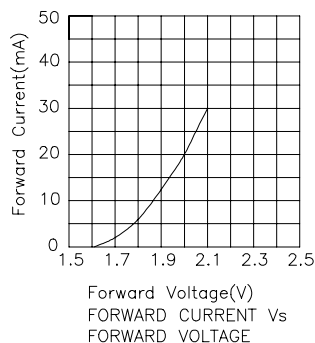
## Bright Red L-934HD



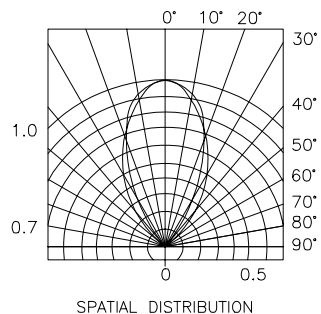
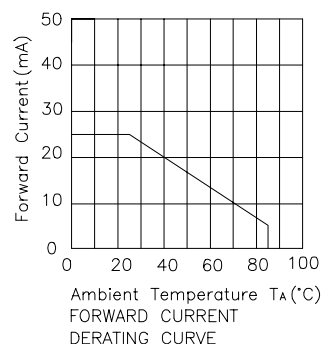
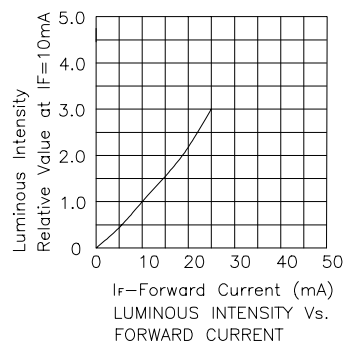
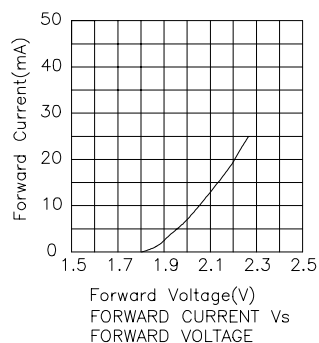
## High Efficiency Red L-934ID,L-934IT



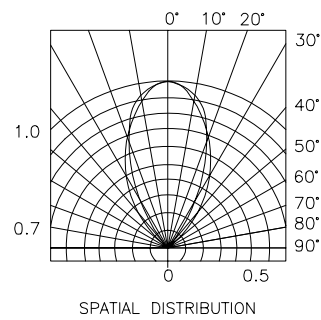
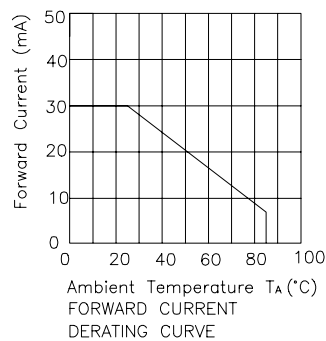
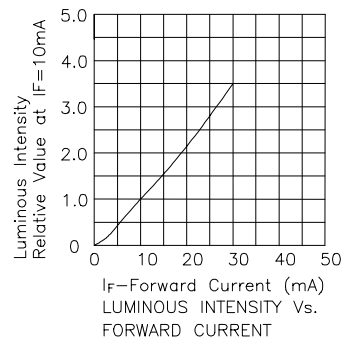
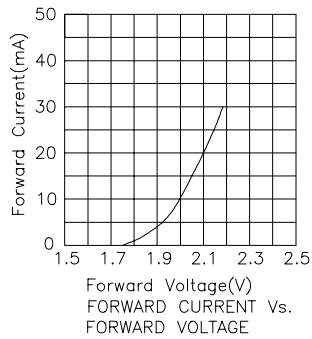
## High Efficiency Red L-934EC Orange L-934ED



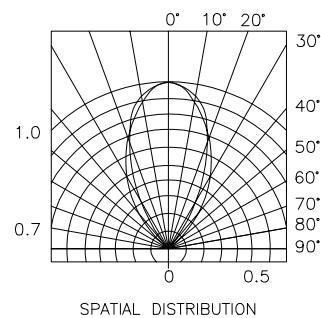
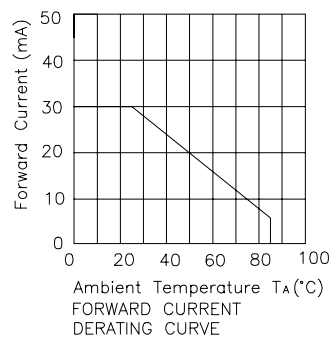
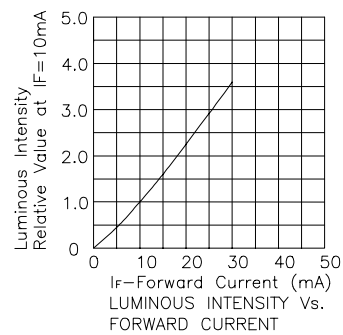
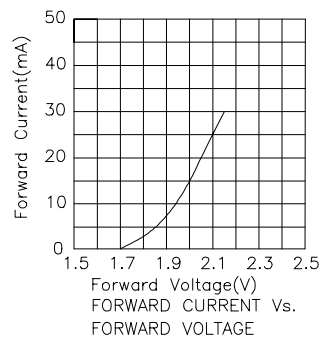
## Green L-934GD,L-934GC,L-934GT



## Yellow L-934YD,L-934YC,L-934YT



## Pure Orange L-934ND,L-934NC,L-934NT



## Pure Green L-934PGD,L-934PGC,L-934PGT

