



## T-1 (3mm) BI-COLOR INDICATOR LAMPS

L-93WEG HIGH EFFICIENCY RED / GREEN L-93WEY HIGH EFFICIENCY RED / YELLOW L-93WGY GREEN / YELLOW

### **Features**

- •UNIFORM LIGHT OUTPUT.
- •LOW POWER CONSUMPTION.
- **•BOTH MILKY WHITE DIFFUSION AND WATER CLEAR** LENS ARE AVAILABLE.
- •3 LEADS WITH ONE COMMON LEAD.
- •THIRD COLOR (MIXED COLOR) AVAILABLE.
- •SUPER BRIGHT VERSION AVAILABLE.
- •I.C. COMPATIBLE.
- •LONG LIFE SOLID STATE RELIABILITY.

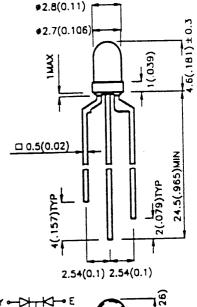
## Description

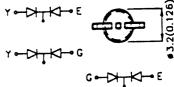
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The High Efficiency Red 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.

## Package Dimensions





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

## Selection Guide

Selection		Lens Type	lv (mcd) @ 20 mA		Viewing Angle
Part No.	Dice	Lens 17po	Min.	Max.	201/2
	HIGH EFFICIENCY RED (GaAsP/GaP)	WANTE DIEFLICED	20	50	60°
L-93WEGW	GREEN (GaP)	- WHITE DIFFUSED	20	50	
L-93WEYW	HIGH EFFICIENCY RED (GaAsP/GaP)		20	50	60°
	YELLOW (GaAsP/GaP)	WHITE DIFFUSED	20	50	
	GREEN (GaP)	215511050	20	50	60°
L-93WGYW	YELLOW (GaAsP/GaP)	WHITE DIFFUSED	20	50	
L-93WEGC	HIGH EFFICIENCY RED (GaAsP/GaP)	INVATED OF EAR	40	160	24°
	GREEN (GaP)	WATER CLEAR	20	80	
L-93WEYC	HIGH EFFICIENCY RED (GaAsP/GaP)		40	160	24°
	YELLOW (GaAsP/GaP)	WATER CLEAR	20	80	
	GREEN (GaP)		20	80	24°
L-93WGYC	YELLOW (GaAsP/GaP)	WATER CLEAR	20	80	

#### Note

1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Green Yellow	625 565 590		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	High Efficiency Red Green Yellow	45 30 35		nm	IF=20mA
C	Capacitance	High Efficiency Red Green Yellow	12 45 10		pF	VF=0V;f=1MHz
VF	Forward Voltage	High Efficiency Red Green Yellow	2.0 2.2 2.1	2.5 2.5 2.5	V	IF=20mA
l <sub>R</sub>	Reverse Current	All	10		uA	VR = 5V

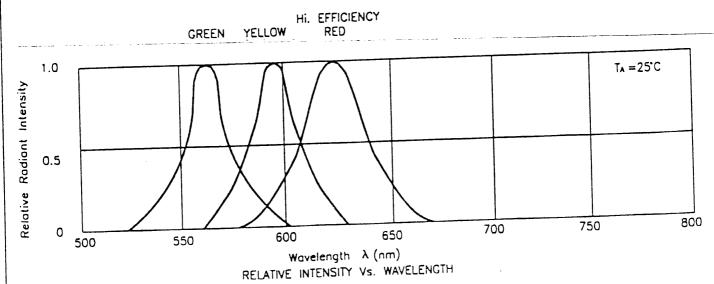
# Absolute Maximum Ratings at T<sub>A</sub>=25°C

105 25	105	mW mA			
25	30	mA			
	150	mA			
150	150				
5	5	V			
-40°C To +85°C					

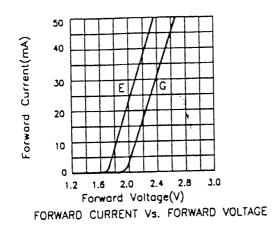
### Notes:

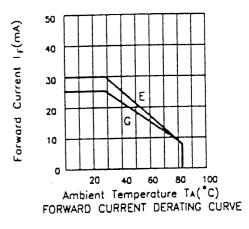
1. τ≤10μs.

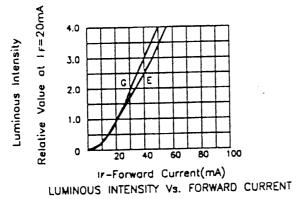
2. 4mm below package base.

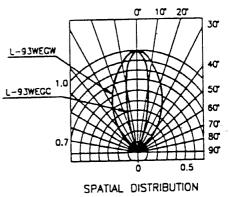


# High Efficiency Red / Green L-93WEGW,L-93WEGC

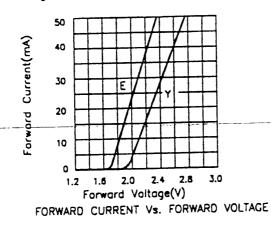


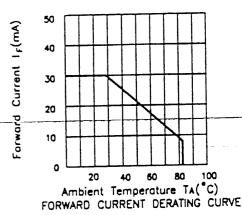


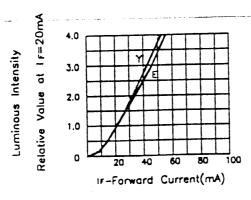


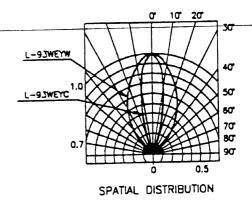


## High Efficiency Red / Yellow L-93WEYW,L-93WEYC



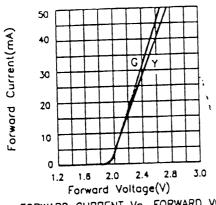


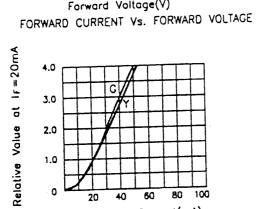




# Green / Yellow L-93WGYW,L-93WGYC

Luminous Intensity





IF-Forward Current(mA)
LUMINOUS INTENSITY Vs. FORWARD CURRENT

