Kingbright®

T- 1 (3mm) SUPER BRIGHT LED LAMPS

L-934SE SUPER BRIGHT ORANGE

L-934SY SUPER BRIGHT YELLOW

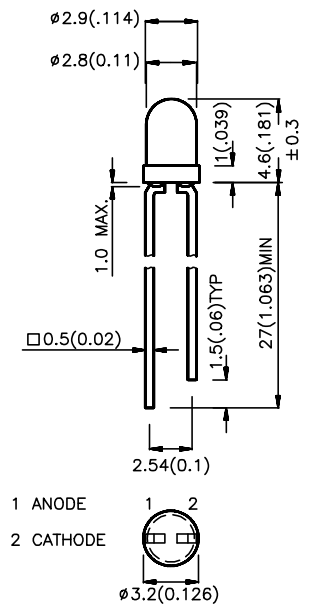
Features

- ULTRA BRIGHTNESS.
- DIFFUSED, WATER CLEAR AND TRANSPARENT LENS ARE AVAILABLE.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.

Description

The Super Bright Orange source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.
The Super Bright Yellow source color devices are made with DH InGaAlP on GaAs substrate 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 subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Max.	**2q1/2**
L-934SEC	SUPER BRIGHT ORANGE (InGaAlP)	WATER CLEAR	500	2000	50°
L-934SET		ORANGE TRANS.	500	2000	50°
L-934SED		ORANGE DIFFUSED	200	700	60°
L-934SYC	SUPER BRIGHT YELLOW (InGaAlP)	WATER CLEAR	200	1300	50°
L-934SYT		YELLOW TRANS.	200	1300	50°
L-934SYD		YELLOW DIFFUSED	100	400	60°

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

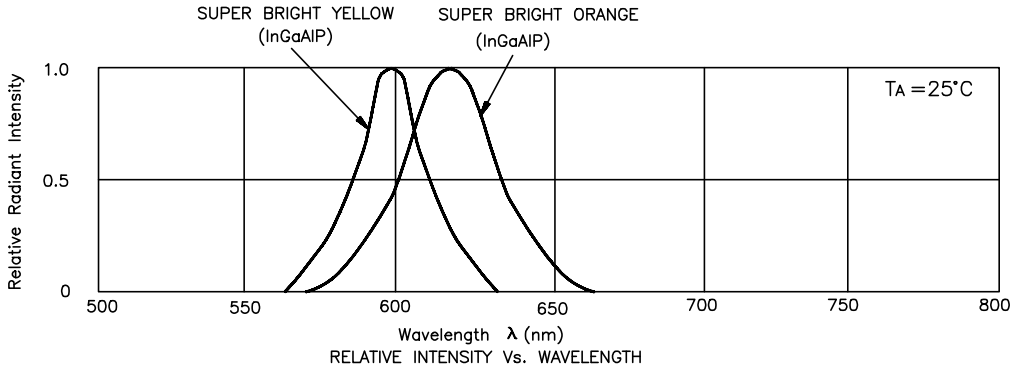
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Orange Super Bright Yellow	620 595		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Super Bright Orange Super Bright Yellow	15 20		nm	IF=20mA
C	Capacitance	Super Bright Orange Super Bright Yellow	40 33		pF	VF=0V;f=1MHz
V_F	Forward Voltage	Super Bright Orange Super Bright Yellow	1.95 2.0	2.5 2.4	V	IF=20mA
I_R	Reverse Current	All	10		uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

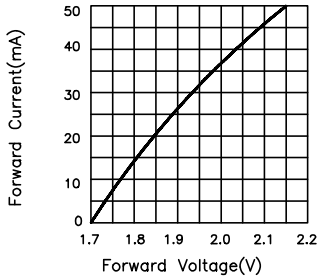
Parameter	Super Bright Orange	Super Bright Yellow	Units
Power dissipation	75	125	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	150	150	mA
Reverse Voltage	5	5	V
Operation/Storage Temperature	-40 °C To +85 °C		
Lead Solder Temperature [2]	260 °C For 5 Seconds		

Notes:
1.1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.

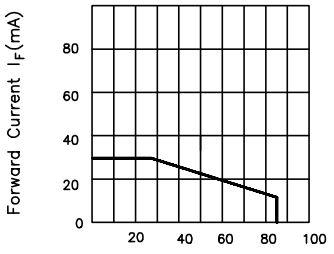


RELATIVE INTENSITY Vs. WAVELENGTH

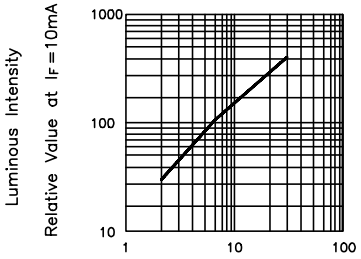
Super Bright Orange L-934SEC, L-934SET, L-934SED



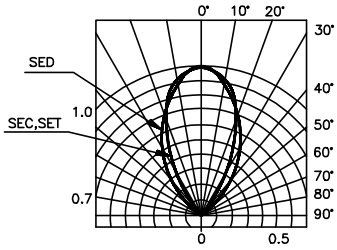
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

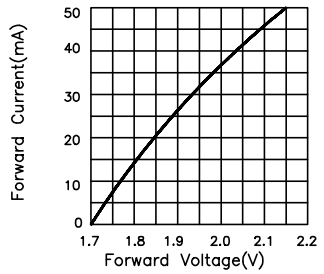


LUMINOUS INTENSITY Vs. FORWARD CURRENT

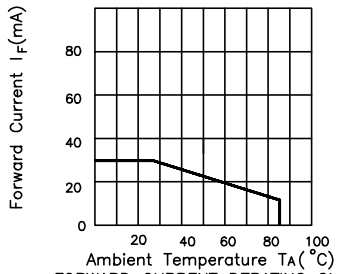


SPATIAL DISTRIBUTION

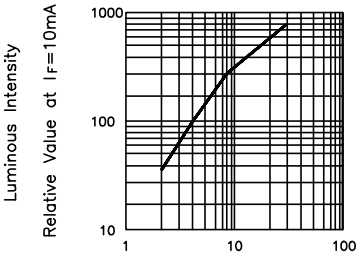
Super Bright Yellow L-934SYC, L-934SYT, L-934SYD



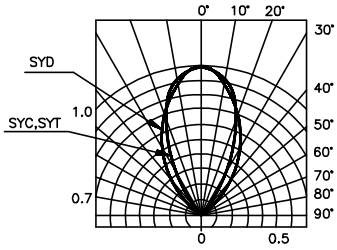
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION