

Features

- HYPER BRIGHTNESS.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- I.C. COMPATIBLE.

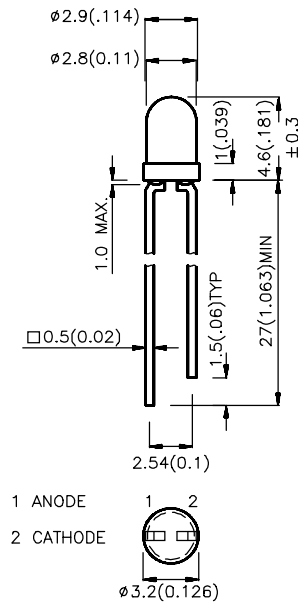
L934SURC HYPER RED

L934SURC/E HYPER RED

Description

The Hyper Red (SUR) source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.
The Hyper Red (SUR/E)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 $\pm 0.25(0.01)$ 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) @ 20 mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
L934SURC	HYPER RED (InGaAlP)	WATER CLEAR	500	1300	50°
L934SURC/E	HYPER RED (InGaAlP)	WATER CLEAR	1000	1300	50°

Note:

1. $\theta 1/2$ 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

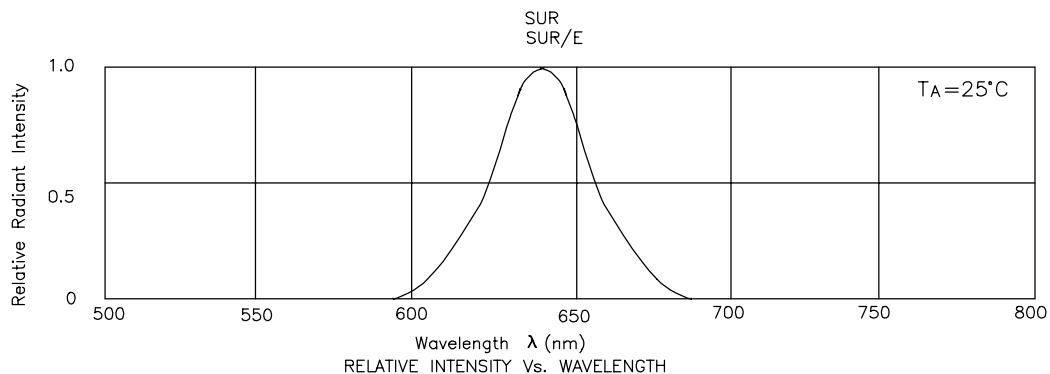
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Hyper Red (SUR) Hyper Red (SUR/E)	640 640		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Hyper Red (SUR) Hyper Red (SUR/E)	25 25		nm	IF=20mA
C	Capacitance	Hyper Red (SUR) Hyper Red (SUR/E)	35 30		pF	VR=0V;f=1MHz
V _F	Forward Voltage	Hyper Red (SUR) Hyper Red (SUR/E)	2.0 2.45	2.2 2.6	V	IF=20mA
I _R	Reverse Current	Hyper Red (SUR) Hyper Red (SUR/E)	10		uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

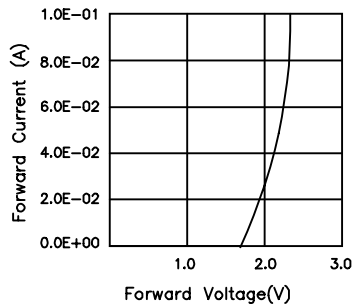
Parameter	Hyper Red (SUR)	Hyper Red (SUR/E)	Units
Power dissipation	170	120	mW
DC Forward Current	50	40	mA
Peak Forward Current [1]	150	150	mA
Reverse Voltage	5	5	V
Operating/Storage Temperature	-40°C To +85°C		
Lead Soldering Temperature [2]	260°C For 5 Seconds		

Notes:

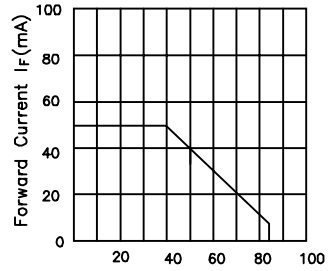
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



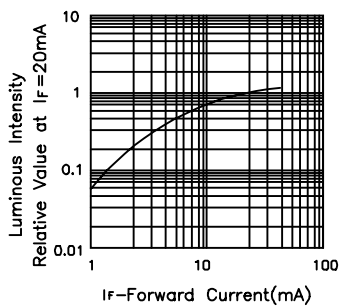
Hyper Red L934SURC



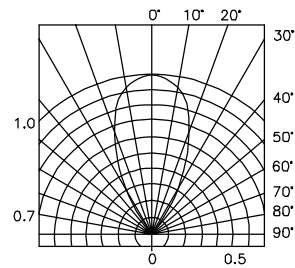
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

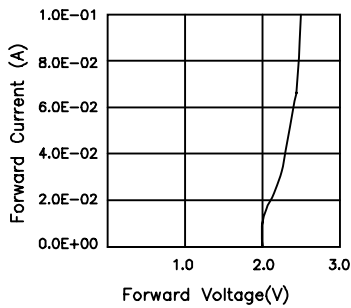


LUMINOUS INTENSITY Vs. FORWARD CURRENT

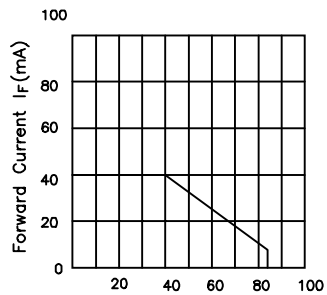


SPATIAL DISTRIBUTION

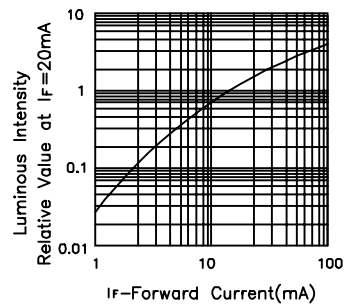
Hyper Red L934SURC/E



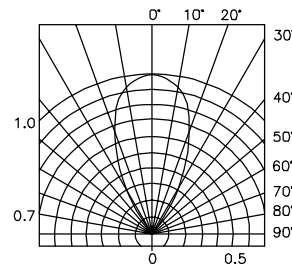
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION