



L-7104SURC-E HYPER RED

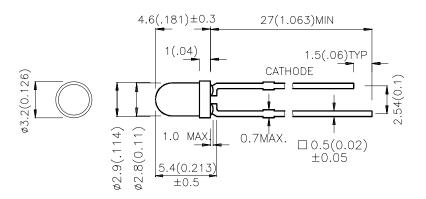
### **Features**

- •ULTRA BRIGHTNESS.
- •WATER CLEAR LENS IS AVAILABLE.
- •OUTSTANDING MATERIAL EFFICIENCY.
- •RELIABLE AND RUGGED.
- •IC COMPATIBLE/LOW CURRENT CAPABILITY.

## Description

The Hyper Red source color devices are made with DH InGaAIP 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 subject to change without notice.

SPEC NO: KDA0642 APPROVED: J.LU REV NO: V.1 CHECKED: DATE: OCT/02/2001 DRAWN: J.X.FU PAGE: 1 OF 3



## **Selection Guide**

Part No.	Dice Lens Type		lv (mcd) @ 20 mA		<b>Viewing</b> Angle
			Min.	Тур.	201/2
L-7104SURC-E	HYPER RED (InGaAIP)	WATER CLEAR	1000	1300	34°

#### Note:

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red	640		nm	IF=20mA
λD	Dominate Wavelength	Hyper Red	630		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	Hyper Red	25		nm	IF=20mA
С	Capacitance	Hyper Red	45		pF	VR=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Hyper Red	1.9	2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	Hyper Red		10	uA	VR = 5V

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

Parameter	Hyper Red	Units
Power dissipation	150	mW
DC Forward Current	40	mA
Peak Forward Current [1]	200	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

### Notes

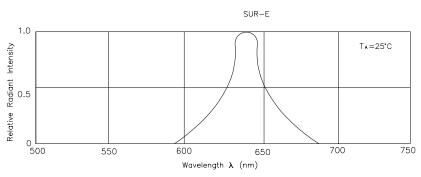
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 4mm below package base.

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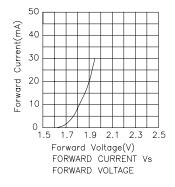
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

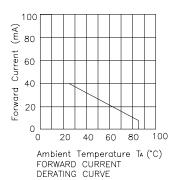


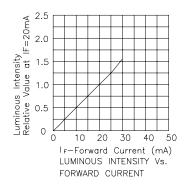


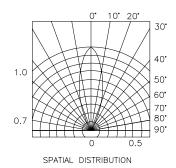
### RELATIVE INTENSITY Vs. WAVELENGTH

## Hyper Red L-7104SURC-E









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