

PRELIMINARY SPEC

Part Number: L-53LSURDK

Hyper Red

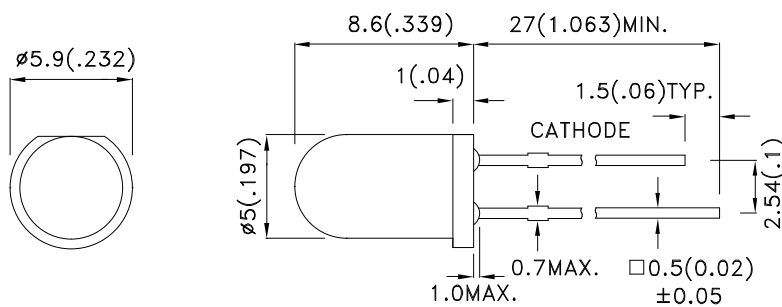
### Features

- Low power consumption.
- Popular T-1 3/4 diameter package.
- General purpose leads.
- Reliable and rugged.
- Long life - solid state reliability.
- Available on tape and reel.
- Low current IF=2mA operating.
- RoHS compliant.

### Description

The Hyper Red source color devices are made with In-GaAlP 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 leads emerge from the package.
4. Specifications are subject to change without notice.



## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
L-53LSURDK	Hyper Red (InGaAlP)	RED DIFFUSED	28	80	60°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Hyper Red	650		nm	I <sub>F</sub> =2mA
λ <sub>D</sub> [1]	Dominant Wavelength	Hyper Red	635		nm	I <sub>F</sub> =2mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	Hyper Red	28		nm	I <sub>F</sub> =2mA
C	Capacitance	Hyper Red	35		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub> [2]	Forward Voltage	Hyper Red	1.75	2.5	V	I <sub>F</sub> =2mA
I <sub>R</sub>	Reverse Current	Hyper Red		10	uA	V <sub>R</sub> = 5V

Notes:

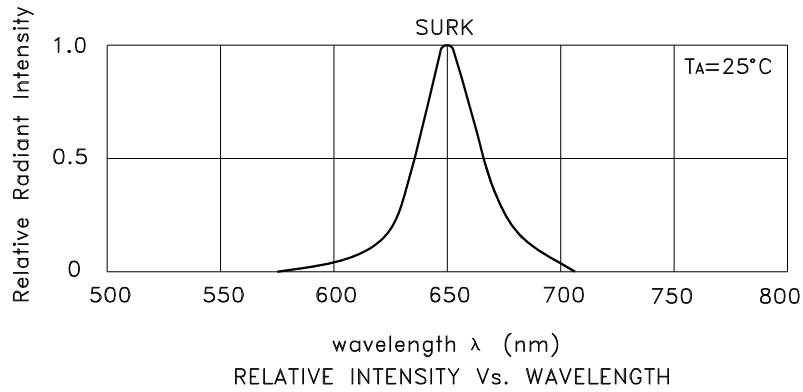
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

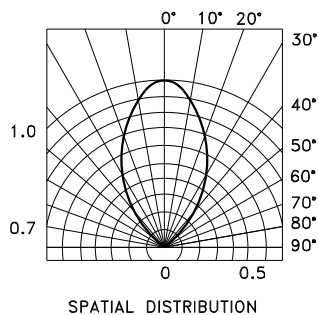
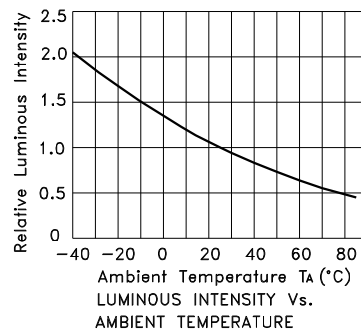
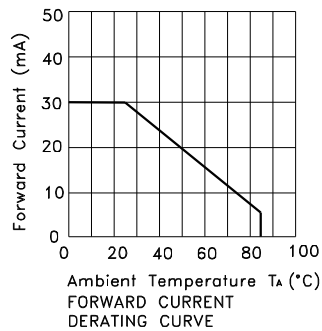
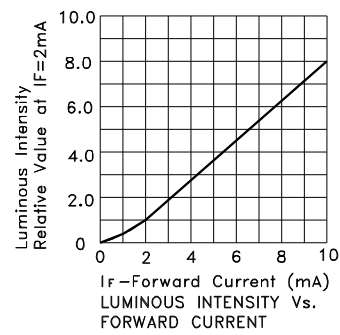
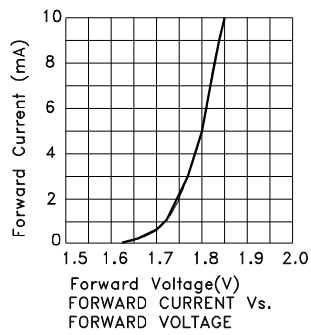
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



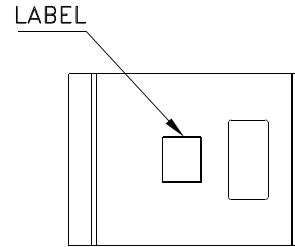
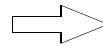
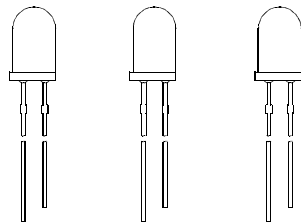
## Hyper Red

### L-53LSURDK



**PACKING & LABEL SPECIFICATIONS**

**L-53LSURDK**

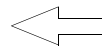


500PCS / BAG

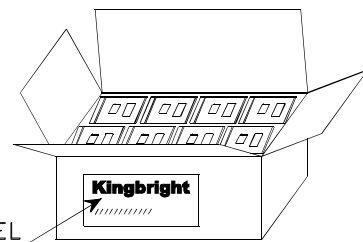


20K / 9# BOX

OUTSIDE LABEL



OUTSIDE LABEL



10K / 5# BOX

## Kingbright

P/NO: L-53xxx

QTY: 500 pcs

Q.C.

Q C

S/N: XXXX

XX XX XXXX  
PASSED

CODE: XXX

LOT NO:



xxxxxxxxxxxxxxxxxxxxxxxxxxxx

RoHS Compliant