



L-53HD

**BRIGHT RED** 

#### **Features**

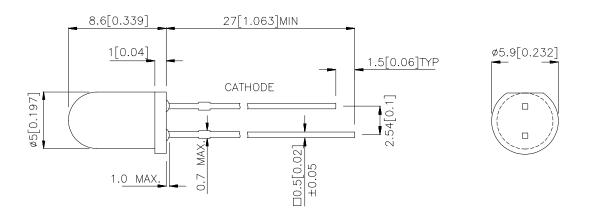
- •LOW POWER CONSUMPTION.
- •POPULAR T-1 3/4 DIAMETER PACKAGE.
- •GENERAL PURPOSE LEADS.
- •RELIABLE AND RUGGED.
- •LONG LIFE SOLID STATE RELIABILITY.

### **Description**

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

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# **Package Dimensions**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25 (0.01")$  unless otherwise noted.
- $3. \ \mbox{Lead}$  spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

SPEC NO: DSAA4828 REV NO: V.3 DATE:JAN/16/2003 APPROVED: J.LU CHECKED: Allen Liu DRAWN:L.ZHANG



#### **Selection Guide**

Part No.	Dice	Lens Type	<b>lv (mcd)</b> @ 10mA		<b>Viewing</b> Angle
		,,	Min. Ty		201/2
L-53HD	BRIGHT RED(GaP)	RED DIFFUSED	1.8	5	60°

#### Note:

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Bright Red	700		nm	IF=20mA
λD	Dominate Wavelength	Bright Red	660		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Bright Red	45		nm	IF=20mA
С	Capacitance	Bright Red	40		pF	V <sub>F</sub> =0V;f=1MHz
VF	Forward Voltage	Bright Red	2.25	2.5	V	I=20mA
lR	Reverse Current	Bright Red		10	uA	V <sub>R</sub> = 5V

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

Parameter	Bright Red		
Power dissipation	120	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	130	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2] 260°C For 5 Seconds			

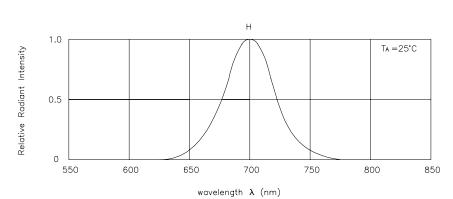
#### Notes:

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

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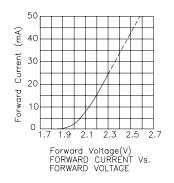
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

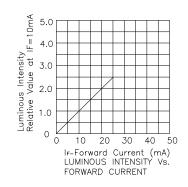
# Kingbright

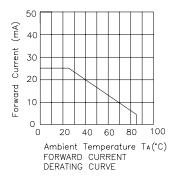


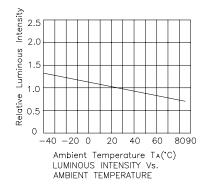
RELATIVE INTENSITY Vs. WAVELENGTH

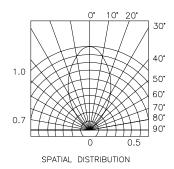
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