

L53ID12V HIGH EFFICIENCY RED

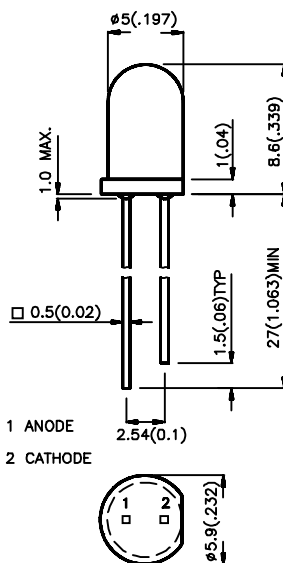
### Features

- HIGH INTENSITY.
- 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.
- 12V INTERNAL RESISTOR.

### Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange 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) V=12V		Viewing Angle
			Min.	Typ.	2θ1/2
L53ID12V	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	12	30	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<sub>A</sub>=25°C

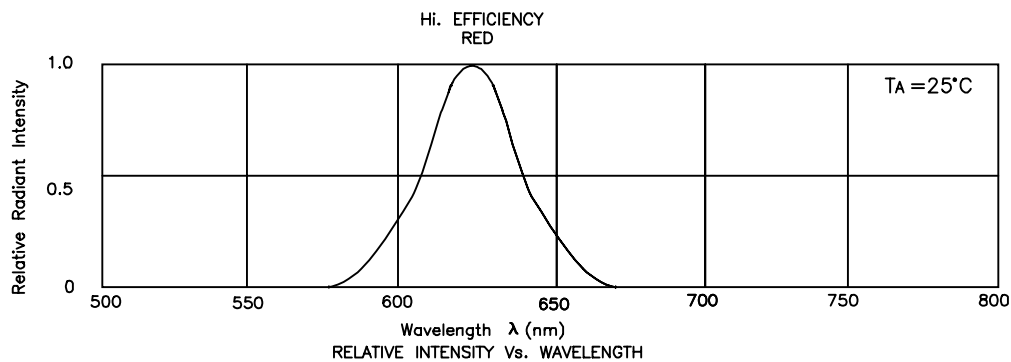
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red	627		nm	VF=12V
λ <sub>D</sub>	Dominate Wavelength	High Efficiency Red	625		nm	VF=12V
Δλ <sub>1/2</sub>	Spectral Line Halfwidth	High Efficiency Red	45		nm	VF=12V
I <sub>F</sub>	Forward Current	High Efficiency Red	8.5		mA	VF=12V
I <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V

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

Parameter	High Efficiency Red	Units
Power dissipation	120	mW
DC Forward Voltage	14	V
Reverse Voltage	5	V
Operation Temperature	-40°C To +70°C	
Storage Temperature	-40°C To +85°C	
Lead Solder Temperature[1]	260°C For 5 Seconds	

Notes:

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



## High Efficiency Red L53ID12V

