

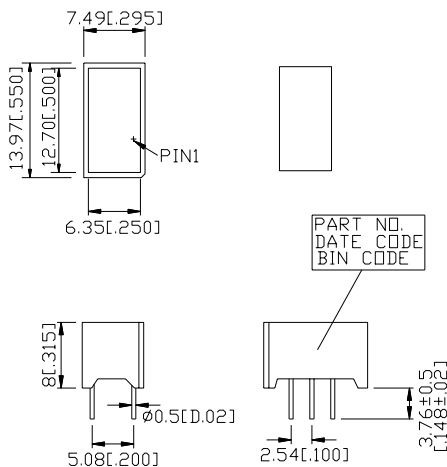
### Features

- 12.7mm 6.35mm rectangular light bar.
- Choices of three bright colors-green/yellow/high efficiency red.
- Large, bright, uniform light emitting areas.
- Low power requirement.
- Excellent ON-OFF contrast.
- Can be used with panel and legend mount.
- Easy mounting on P.C. board.
- Categorized for light output.
- Yellow and green categorized for dominant wavelength.

### Description

The LTL-53173Y/54173G/57173HR series bars are rectangular light sources designed for a variety of applications where a large bright source of light is required. These light bars are configured in dual-in-line packages. The green series devices utilize LED chips which are made from GaP on a transparent GaP substrate. The yellow and high efficiency red series devices utilize LED chips which are made from GaAsP on a transparent GaP substrate. The green Devices have green bars, yellow devices have yellow bars, and high-efficiency red devices have red bars.

### Package Dimensions



#### Notes :

All dimensions are in millimeters (inches).

Tolerance: 0.25mm (0.010 ) unless otherwise noted.

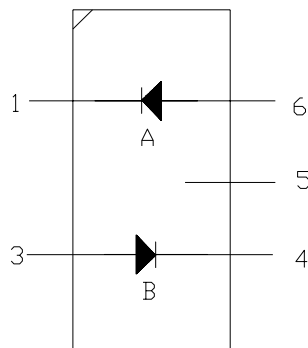
### Devices

Part No. LTL-			Description
Green	Yellow	Hi. Eff. Red	
54173G	53173Y	57173HR	Universal, Rectangular Bar

### Pin Connection

Pin No.	Connection
1	Cathode A
2	No Pin
3	Anode B
4	Cathode B
5	No Connection
6	Anode A

### Internal Circuit Diagram



## Absolute Maximum Ratings at Ta=25

Parameter	Green	Yellow	Hi. -Eff. Red	Unit
Power Dissipation Per Chip	75	60	75	mW
Peak Forward Current Per Chip (1/10 Duty Cycle, 0.1ms Pulse Width)	100	80	100	mA
Continuous Forward Current Per Chip Derating Linear from 25 Per Chip	25 0.33	20 0.27	25 0.33	mA mA/
Reverse Voltage Per Chip	5	5	5	V
Operating Temperature Range	-35 to +85			
Storage Temperature Range	-35 to +85			
Solder Temperature 1/16 Inch Below Seating Plane for 3 Seconds at 260				

## Electrical/Optical Characteristics at Ta=25

LTL-54173G

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity	I <sub>v</sub>	2.3	4.2		mcd	I <sub>f</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		565		nm	I <sub>f</sub> =20mA
Spectral Line Half-Width	Δλ		30		nm	I <sub>f</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		569		nm	I <sub>f</sub> =20mA
Forward Voltage, and Chip	V <sub>F</sub>		2.1	2.6	V	I <sub>f</sub> =20mA
Reverse Current, and Chip	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V

LTL-53173Y

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity	I <sub>v</sub>	2.3	4.2		mcd	I <sub>f</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		585		nm	I <sub>f</sub> =20mA
Spectral Line Half-Width	Δλ		35		nm	I <sub>f</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		588		nm	I <sub>f</sub> =20mA
Forward Voltage, and Chip	V <sub>F</sub>		2.1	2.6	V	I <sub>f</sub> =20mA
Reverse Current, and Chip	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V

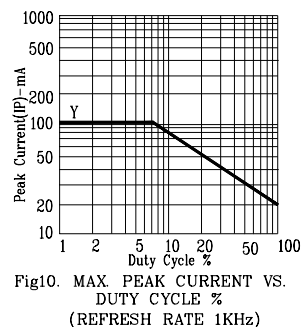
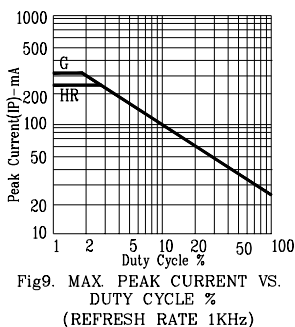
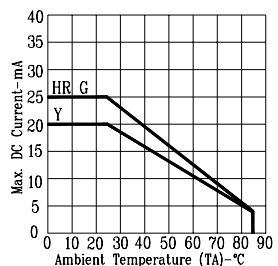
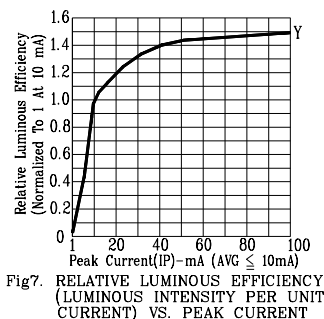
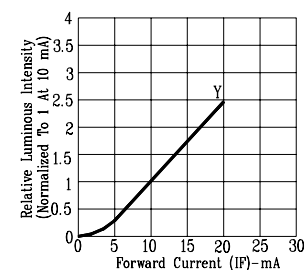
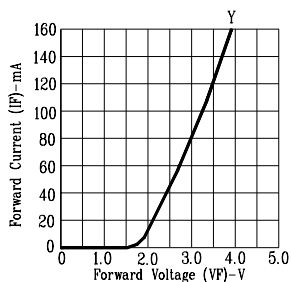
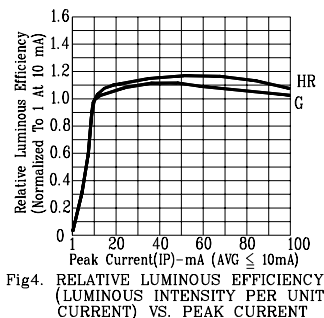
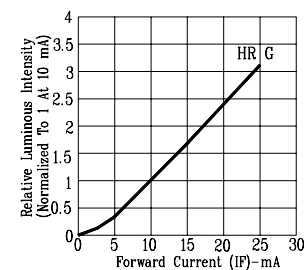
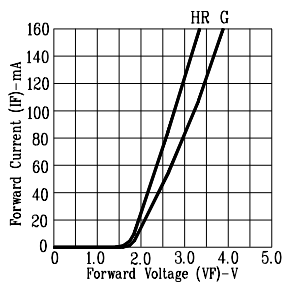
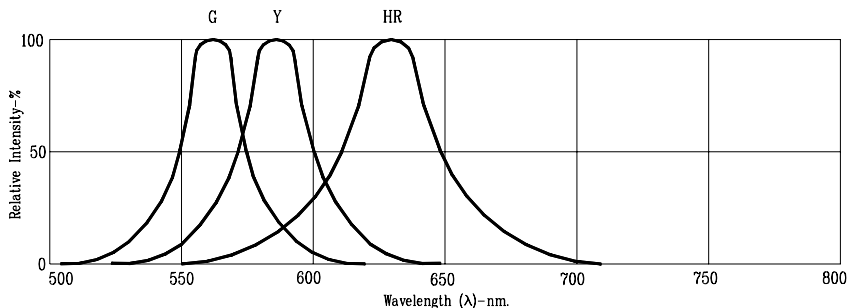
LTL-57173HR

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity	I <sub>v</sub>	2.3	4.2		mcd	I <sub>f</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		635		nm	I <sub>f</sub> =20mA
Spectral Line Half-Width	Δλ		40		nm	I <sub>f</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		623		nm	I <sub>f</sub> =20mA
Forward Voltage, and Chip	V <sub>F</sub>		2.0	2.6	V	I <sub>f</sub> =20mA
Reverse Current, and Chip	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V

Notes: 1.Clean only in water, isopropanol,ethanol,freon TF (or equivalent).

2.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage)eye-response curve.

# Typical Electrical/Optical Characteristic Curves (25 Ambient Temperature Unless Otherwise Noted)



NOTE: HR=HI.EFF.RED G=GREEN Y=YELLOW (REFRESH RATE 1KHz)