LITEON

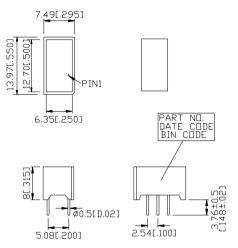
Features

- + 12.7mm \times 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 reguired. 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.

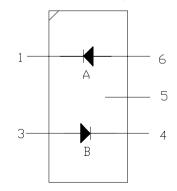
Devices

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°C

Parameter	Green	Yellow	HiEff. 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/°C			
Reverse Voltage Per Chip	5	5	5	V			
Operating Temperature Range		-35°C to +85°C					
Storage Temperature Range		-35°C to +85°C					
Solder Temperature 1/16 Inch Below Seating Plan	ne for 3 Seconds at 260	Ċ					

Electrical/Optical Characteristics at Ta=25°C

LTL-54173G

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Average Luminous Intensity	Iv	2.3	4.2		mcd	I⊧=10mA
Peak Emission Wavelength	λΡ		565		nm	I⊧=20mA
Spectral Line Half-Width	Δλ		30		nm	I⊧=20mA
Dominant Wavelength	λd		569		nm	I⊧=20mA
Forward Voltage, and Chip	VF		2.1	2.6	V	I⊧=20mA
Reverse Current, and Chip	IR			100	μA	VR=5V

LTL-53173Y

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Average Luminous Intensity	Iv	2.3	4.2		mcd	IF=10mA
Peak Emission Wavelength	λΡ		585		nm	I⊧=20mA
Spectral Line Half-Width	Δλ		35		nm	I⊧=20mA
Dominant Wavelength	λd		588		nm	I⊧=20mA
Forward Voltage, and Chip	VF		2.1	2.6	V	I⊧=20mA
Reverse Current, and Chip	IR			100	μA	Vr=5V

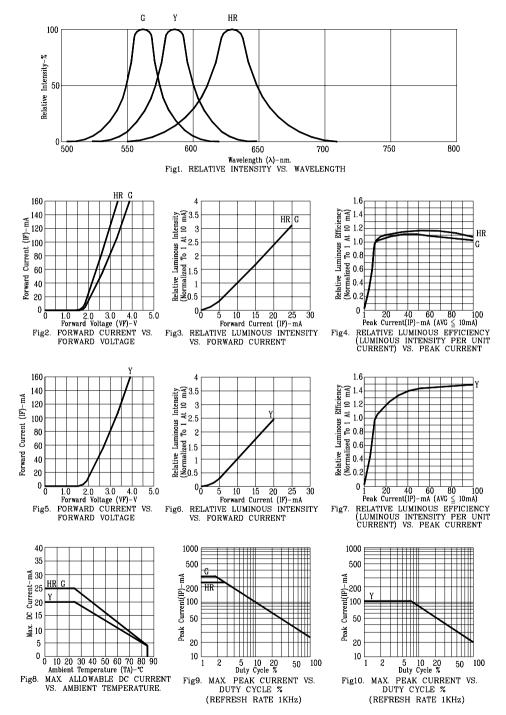
LTL-57173HR

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Average Luminous Intensity	Iv	2.3	4.2		mcd	I⊧=10mA
Peak Emission Wavelength	λΡ		635		nm	I⊧=20mA
Spectral Line Half-Width	Δλ		40		nm	I⊧=20mA
Dominant Wavelength	λd		623		nm	I⊧=20mA
Forward Voltage, and Chip	VF		2.0	2.6	V	I⊧=20mA
Reverse Current, and Chip	IR			100	μA	Vr=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°C Ambient Temperature Unless Otherwise Noted)



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