

Features

- 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

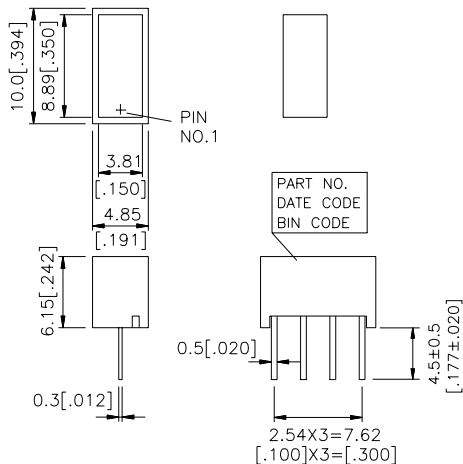
The LTL-2300/2400/2500/2600/2700/2800 series light bars are rectangular light sources designed for a variety of applications where a large bright source of light is required. These light bars are configured in single-in-line and dual-in-line packages. The green series devices utilize LED chips which 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. All devices have white bar.

Devices

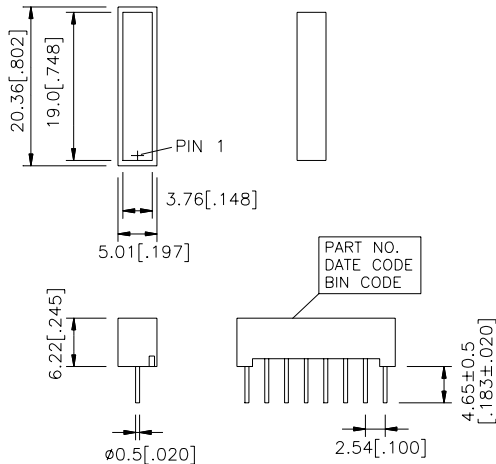
Part No.			Size of Light Emitting Areas	Package Dimension		Internal Circuit Diagram
Green	Yellow	Hi. Eff. Red				
2500G	2400Y	2300HR	8.89mm × 3.81mm(.350 in × .150 in.)	A		A
2550G	2450Y	2350HR	19mm × 3.76mm(.748 in × .148 in.)	B		B
2800G	2700Y	2600HR	8.89mm × 3.81mm(.350 in × .150 in.)	C		C
2855G	2755Y	2655HR	8.89mm × 8.89mm(.350 in × .350 in.)	D		D
2820G	2720Y	2620HR	8.89mm × 3.81mm(.350 in × .150 in.)	E		E
2885G	2785Y	2685HR	8.89mm × 19.05mm(.350 in × .750 in.)	F		F

Package Dimensions

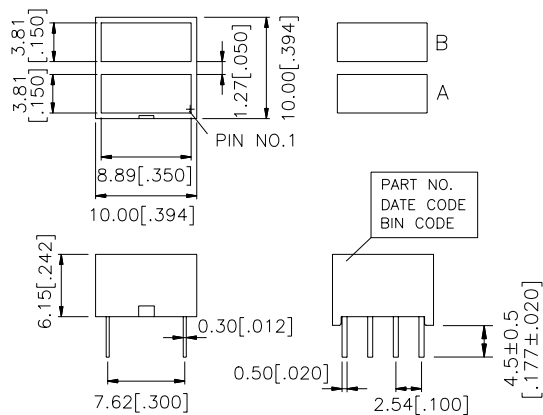
A. LTL-2300/2400/2500



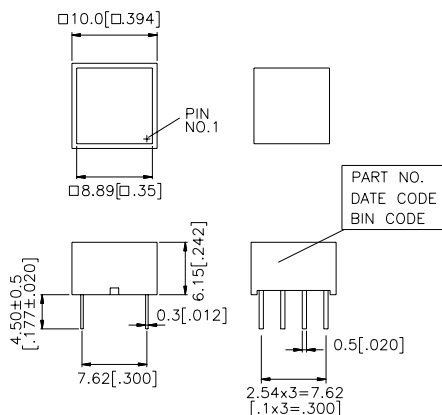
B. LTL-2350/2450/2550



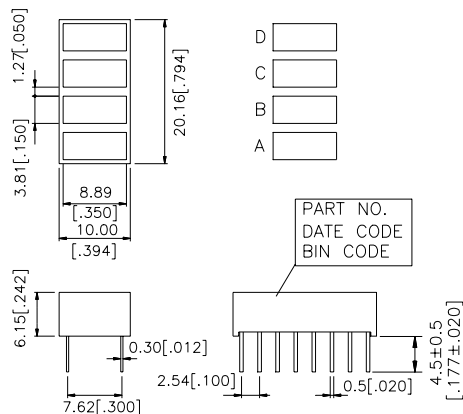
C. LTL-2600/2700/2800



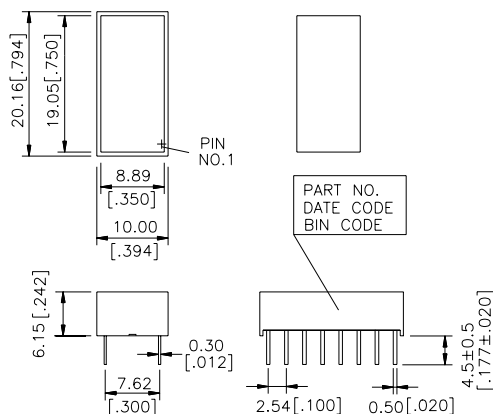
D. LTL-2655/2755/2855



E. LTL-2620/2720/2820



F. LTL-2685/2785/2885



Notes : All dimensions are in millimeters (inches). Tolerance: $\pm 0.25\text{mm}$ (0.010") unless otherwise noted.

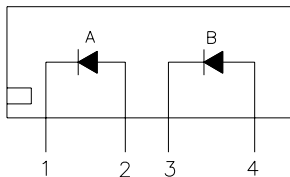
Pin Connection

Pin No.	Connection			
	A LTL-2300/2400/2500	B LTL-2350/2450/2550	C LTL-2600/2700/2800	D LTL-2655/2755/2855
1	Cathode A	Cathode A	Cathode A	Cathode A
2	Anode A	Anode A	Anode A	Anode A
3	Cathode B	Cathode B	Anode B	Anode B
4	Anode B	Anode B	Cathode B	Cathode B
5		Cathode C	Cathode C	Cathode C
6		Anode C	Anode C	Anode C
7		Cathode D	Anode D	Anode D
8		Anode D	Cathode D	Cathode D

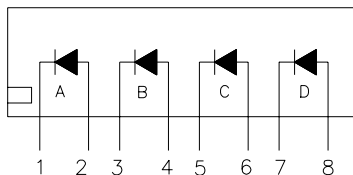
Pin No.	Connection	
	E. LTL-2620/2720/2820	F. LTL-2685/2785/2885
1	Cathode A	Cathode A
2	Anode A	Anode A
3	Anode B	Anode B
4	Cathode B	Cathode B
5	Cathode C	Cathode C
6	Anode C	Anode C
7	Anode D	Anode D
8	Cathode D	Cathode D
9	Cathode E	Cathode E
10	Anode E	Anode E
11	Anode F	Anode F
12	Cathode F	Cathode F
13	Cathode G	Cathode G
14	Anode G	Anode G
15	Anode H	Anode H
16	Cathode H	Cathode H

Internal Circuit Diagrams

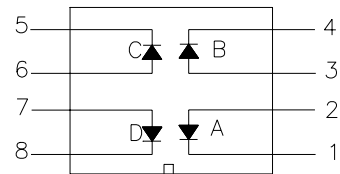
A. LTL-2300/2400/2500



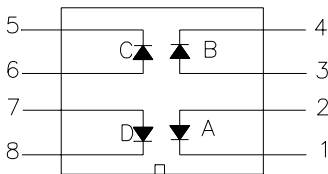
B. LTL-2350/2450/2550



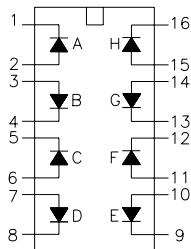
C. LTL-2600/2700/2800



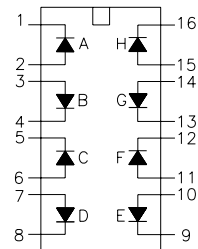
D. LTL-2655/2755/2855



E. LTL-2620/2720/2820



F. LTL-2685/2785/2885



Absolute Maximum Ratings at Ta=25°C

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°C 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 Plane for 3 Seconds at 260°C				

Electrical/Optical Characteristics at Ta=25°C

Hi.-Eff Red LTL-2300HR/2600HR

Parameter	LTL-	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity Per Bar	2300	I _v	1.4	4.2		mcd	I _f =10mA
	2350		3.5	8			
	2600		1.4	4.2			
	2620		1.4	4.2			
	2655		3.5	8			
	2685		7	16			
Peak Emission Wavelength		λ P		635		nm	I _f =20mA
Spectral Line Half-Width		Δ λ		40		nm	I _f =20mA
Dominant Wavelength		λ d		623		nm	I _f =20mA
Forward Voltage, and Bar		V _F		2.0	2.6	V	I _f =20mA
Reverse Current, and Bar		I _R			100	μ A	V _R =5V

Yellow LTL-2400Y/2700Y

Parameter	LTL-	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity Per Bar	2400	I _v	1.4	4.2		mcd	I _f =10mA
	2450		3.5	8			
	2700		1.4	4.2			
	2720		1.4	4.2			
	2755		3.5	8			
	2785		7	16			
Peak Emission Wavelength		λ P		585		nm	I _f =20mA
Spectral Line Half-Width		Δ λ		35		nm	I _f =20mA
Dominant Wavelength		λ d		588		nm	I _f =20mA
Forward Voltage, and Chip		V _F		2.1	2.6	V	I _f =20mA
Reverse Current, and Chip		I _R			100	μ A	V _R =5V

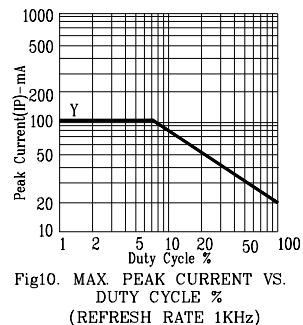
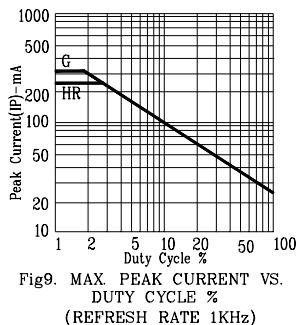
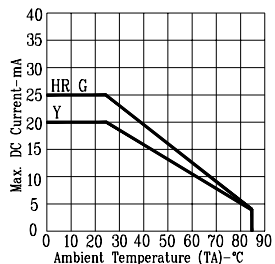
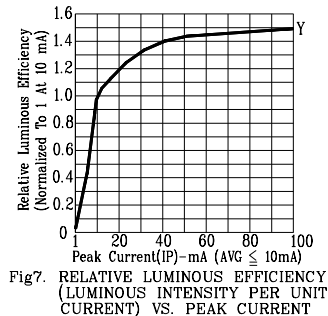
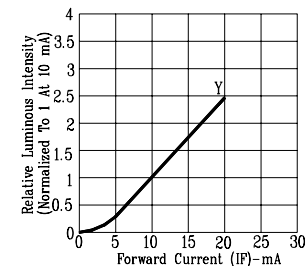
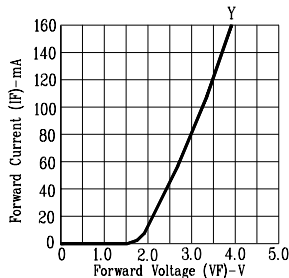
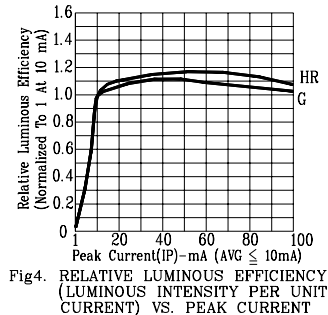
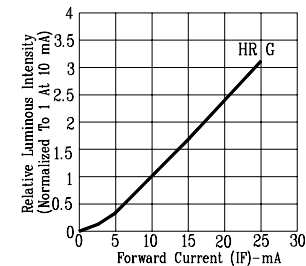
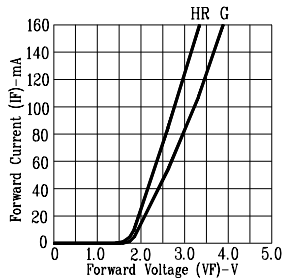
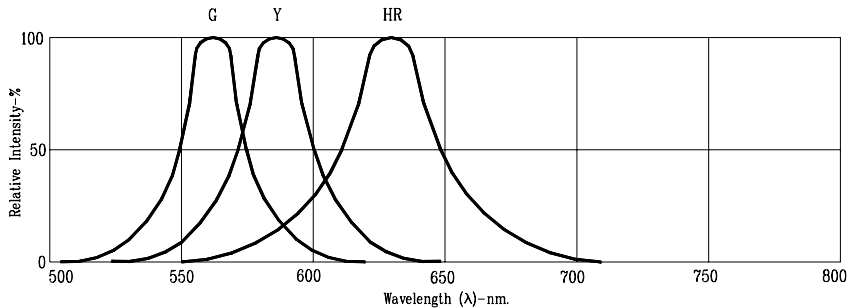
Green LTL-2500G/2800G

Parameter	LTL-	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Average Luminous Intensity Per Bar	2500	I _v	1.4	4.2		mcd	I _f =10mA
	2550		3.5	8			
	2800		1.4	4.2			
	2820		1.4	4.2			
	2855		3.5	8			
	2885		7	16			
Peak Emission Wavelength		λ P		565		nm	I _f =20mA
Spectral Line Half-Width		Δ λ		30		nm	I _f =20mA
Dominant Wavelength		λ d		569		nm	I _f =20mA
Forward Voltage, and Chip		V _F		2.1	2.6	V	I _f =20mA
Reverse Current, and Chip		I _R			100	μ A	V _R =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)