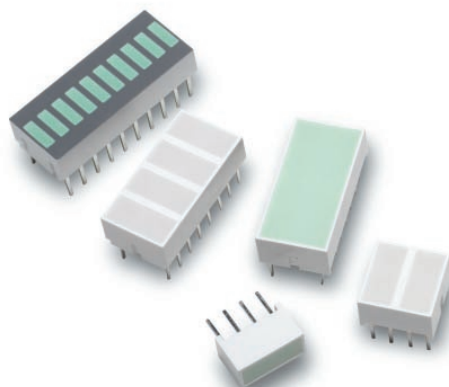
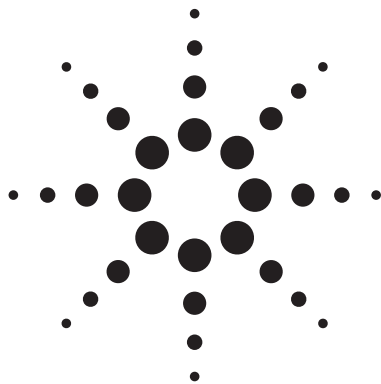


LED Light Bar and Bar Graph Arrays

Product Selection



Light Bars & Bar Graph Arrays Products

LED Light Bars are Agilent's innovative solution to fixed message annunciation. The large, uniformly illuminated light emitting surface is typically used for backlighting legends or simple indicators. Light bar components are offered in AlGaAs, HER, green, yellow and bicolor combinations. The AlGaAs Light Bars provide exceptional brightness at very low drive current for those applications where portability and battery backup are important considerations. Each of the eight X-Y stackable package styles offers one, two or four light emitting surfaces.

In addition to light bars, Agilent offers effective analog message annunciation with the 10-Element LED Bar Graph Arrays. These bar graph arrays eliminate the matching and alignment problems commonly associated with arrays of discrete LED indicators. Each device offers easy to handle packages that are compatible with standard DIP sockets. The 10-Element Bar Graph Arrays is available in AlGaAs, HER, green and yellow. The multicolor 10-Element Bar Graph Arrays have HER, yellow and green in one package. The package is X-Y stackable, with unique interlock allowing easy end-to-end alignment.

About the Products

Light Bar components are used as annunciators that serve three customer functions: status indication, backlighting fixed messages and analog level indications (arrays). Agilent's light bar components are ideal to satisfy annunciator functions in the automotive, industrial, medical and instrumentation, telecommunication and business equipment markets.

Agilent's 10-Element Bar Graph Arrays serve a market need for analog level indication. LED reliability, light emitting viewability make them suitable solutions in place of mechanical meters.

Features & Benefits—Light Bar Components

- Large, Bright, Uniform Light Emitting Surface
- Yellow and Green categorized for Dominant Wavelength
- Low heat dissipation
- Choices of colors —AlGaAs, HER, Green, Yellow
- Various package sizes are X-Y stackable
- Industry standard SIP and DIP packages

Features & Benefits—10-Element Bar Graph Array

- Exclusive package interlock
 - Facilitate end stacking alignment
- Large segment size
 - Wide viewing angle
- Available in AlGaAs, Her, green, yellow and multicolor
 - Wide variety of applications
- Categorized and packaged for luminous intensity
 - Greater uniformity of light output
- Matched LEDs for Uniform Appearance

Typical Applications—Light Bar Components

- Business Machines
 - Point of Sale Bar Code Scanner
 - Electronic Typewriters
 - Fax machines
 - Electronic Scales
 - Postal Meters
- Instrumentation
 - Process Control System
 - Medical Equipment
 - Machine Control Systems
 - Meters and Status Indicators



Agilent Technologies

- Telecommunications
 - PBX Systems
 - Modems
 - Central Switching Systems
 - Diagnostic Equipment
 - Short Wave Radios
- Transportation
 - Automotive Dashboards
 - Truck and Bus Controls
 - Airport Passenger Metal Detectors
 - Ticket Vending Machines

- Consumer
 - Appliance Front Panel
 - Hi-Fi/Stereo Equipment
 - Alarm System

**Typical Application—
10 Element Bar Graph Array**

- Instrumentation
 - Meters
 - Channel Indicators
 - Status Indicators

- Process Control
 - Level Indicators
- Appliances
 - Status of Indication
 - Mode of operation
- Transportation
 - Tachometers
 - Fuel Gauges
- Consumer Products
 - VU Meters (Stereos)
 - Radio Channel Scanners
 - Burglar Alarms

Light Bars

Shape	Size/# Light Emitting	Part Number	Color	Chip (nm) Typ.	Vf (V) Typ.	Vf (V) at If = mA	Iv at If = mA	Iv Min. (mcd)	Iv Typ. (mcd)	2 Intensity Bin Selection
0.4SIP	0.35" x 0.15" 1 area	HLCP-A100	 AlGaAs Red	637	1.8	20	3	3	7.5	B,C
0.4SIP	0.35" x 0.15" 1 area	HLMP-2300	 GaP Red	626	2	20	20	6	23	E,F
0.4SIP	0.35" x 0.15" 1 area	HLMP-2400	 GaP Yellow	585	2.1	20	20	6	20	E,F
0.4SIP	0.35" x 0.15" 1 area	HLMP-2500	 GaP Green	572	2.2	20	20	5	25	F,G
0.8SIP	0.75" x 0.15" 1 area	HLCP-B100	 AlGaAs Red	637	1.8	20	3	6	15	B,C
0.8SIP	0.75" x 0.15" 1 area	HLMP-2350	 GaP Red	626	2	20	20	13	45	E,F
0.8SIP	0.75" x 0.15" 1 area	HLMP-2450	 GaP Yellow	585	2.1	20	20	13	38	E,F
0.8SIP	0.75" x 0.15" 1 area	HLMP-2550	 GaP Green	572	2.2	20	20	11	50	F,G
0.4DIP	0.35" x 0.35" 1 area	HLCP-C100	 AlGaAs Red	637	1.8	20	3	6	15	—
0.4DIP	0.35" x 0.35" 1 area	HLMP-2655	 GaP Red	626	2	20	20	13	45	E,F
0.4DIP	0.35" x 0.35" 1 area	HLMP-2755	 GaP Yellow	585	2.1	20	20	13	38	E,F
0.4DIP	0.35" x 0.35" 1 area	HLMP-2855	 GaP Green	572	2.2	20	20	11	50	F,G
0.4DIP	0.35" x 0.15" 2 areas	HLCP-D100	 AlGaAs Red	637	1.8	20	3	3	7.5	B,C
0.4DIP	0.35" x 0.15" 2 areas	HLMP-2600	 GaP Red	626	2	20	20	6	23	E,F
0.4DIP	0.35" x 0.15" 2 areas	HLMP-2700	 GaP Yellow	585	2.1	20	20	6	20	E,F
0.4DIP	0.35" x 0.15" 2 areas	HLMP-2800	 GaP Green	572	2.2	20	20	5	25	—
0.8DIP	0.35" x 0.15" 4 areas	HLCP-E100	 AlGaAs Red	637	1.8	20	3	3	7.5	B,C
0.8DIP	0.35" x 0.15" 4 areas	HLMP-2620	 GaP Red	626	2	20	20	6	23	E,F
0.8DIP	0.35" x 0.15" 4 areas	HLMP-2720	 GaP Yellow	585	2.1	20	20	6	20	E,F
0.8DIP	0.35" x 0.15" 4 areas	HLMP-2820	 GaP Green	572	2.2	20	20	5	25	F,G
0.8DIP	0.15" x 0.75" 2 areas	HLCP-F100	 AlGaAs Red	637	1.8	20	3	6	15	—
0.8DIP	0.15" x 0.75" 2 areas	HLMP-2635	 GaP Red	626	2	20	20	13	45	—
0.8DIP	0.15" x 0.75" 2 areas	HLMP-2735	 GaP Yellow	585	2.1	20	20	13	38	—
0.8DIP	0.15" x 0.75" 2 areas	HLMP-2835	 GaP Green	572	2.2	20	20	11	50	—
0.8DIP	0.35" x 0.35" 2 areas	HLCP-G100	 AlGaAs Red	637	1.8	20	3	6	15	—
0.8DIP	0.35" x 0.35" 2 areas	HLMP-2670	 GaP Red	626	2	20	20	13	45	—
0.8DIP	0.35" x 0.35" 2 areas	HLMP-2770	 GaP Yellow	585	2.1	20	20	13	38	—
0.8DIP	0.35" x 0.35" 2 areas	HLMP-2870	 GaP Green	572	2.2	20	20	11	50	F,G
0.8DIP	0.35" x 0.75" 1 areas	HLCP-H100	 AlGaAs Red	637	1.8	20	3	12	30	B,C
0.8DIP	0.35" x 0.75" 1 areas	HLMP-2685	 GaP Red	626	2	20	20	22	80	—
0.8DIP	0.35" x 0.75" 1 areas	HLMP-2785	 GaP Yellow	585	2.1	20	20	26	70	E,F
0.8DIP	0.35" x 0.75" 1 areas	HLMP-2885	 GaP Green	572	2.2	20	20	22	100	F,G

Bicolor Light Bars

Shape	Size/# Light Emitting	Part Number	Color	Chip (nm) Typ.	Vf (V) Typ.	Vf (V) at If = mA	Iv at If = mA	Iv Min. (mcd)	Iv Typ. (mcd)	2 Intensity Bin Selection
0.4DIP	0.35" x 0.35" 1 area	HLMP-2950	 GaP Red	626	2	20	20	13	45	—
			 GaP Yellow	585	2.1	20	20	13	38	—
0.4DIP	0.35" x 0.35" 1 area	HLMP-2965	 GaP Red	626	2	20	20	19	45	—
			 GaP Green	572	2.2	20	20	25	50	—

Bar Graph Arrays

10 Element	HLCP-J100	 AlGaAs Red	637	1.6	1	1	600	1000	—
	HDSP-4830	 GaP Red	626	2.1	20	10	900	3500	G,H
	HDSP-4840	 GaP Yellow	585	2.2	20	10	600	1900	F,G
	HDSP-4850	 GaP Green	572	2.1	10	10	600	1900	H,I
Multicolor LA	HDSP-4832	 GaP Red	626	2.1	20	10	600	3500	—
		 GaP Yellow	585	2.2	20	10	600	1900	—
		 GaP Green	572	2.1	10	10	600	1900	—
	HDSP-4836	 GaP Red	626	2.1	20	10	600	3500	—
		 GaP Yellow	585	2.2	20	10	600	1900	—
		 GaP Green	572	2.1	10	10	600	1900	—
		 GaP Yellow	585	2.2	20	10	600	1900	—
		 GaP Red	626	2.1	20	10	600	3500	—

Luminous Intensity Categories

LED Light Bars

Bin ID	Customer Iv in mcd	
	min	max
AlGaAs Red 		
HLCP-A100 / D100 / E100		
GaP Red 		
HLMP-2300 / 2600 / 2620		
B	4.5	8.2
C	6.8	12.1
D	10.1	18.5
E	15.3	27.8
F	22.8	45.5
AlGaAs Red 		
HLCP-B100 / C100 / F100 / G100		
GaP Red 		
HLMP-2350 / 2635 / 2655 / 2670		
B	9.0	16.0
C	13.1	24.0
D	19.7	36.1
E	29.6	54.2
F	44.9	88.8
AlGaAs Red 		
HLCP-H100		
GaP Red 		
HLMP-2685		
B	18.0	27.1
C	22.0	40.8
D	33.3	61.1
E	50.0	91.8
F	75.1	150.0

GaP Yellow 		
HLMP-2400 / 2700 / 2720		
E	13.8	25.3
F	20.7	41.4
HLMP-2450 / 2735 / 2755 / 2770		
E	27.0	50.0
F	40.5	81.0
HLMP-2785		
E	54.0	99.0
F	81.0	162.0
GaP Green 		
HLMP-2500 / 2800 / 2820		
F	18.9	37.8
G	30.6	61.2
HLMP-2550 / 2835 / 2855 / 2870		
F	38.1	76.2
G	61.6	123.2
HLMP-2885		
F	75.1	150.3
G	121.1	242.2

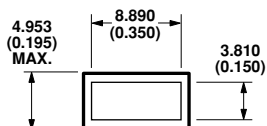
Bicolor Light Bars

Bin ID	Customer Iv in mcd	
	min	max
HLMP-2950/GaP Red 		
D	17.00	31.00
E	25.40	46.50
F	38.10	76.20
GaP Yellow 		
D	18.00	33.00
E	27.00	50.00
F	40.50	81.00
HLMP-2965/GaP Red 		
F	44.90	88.80
G	71.90	143.80
GaP Green 		
F	38.10	76.20
G	61.60	123.20

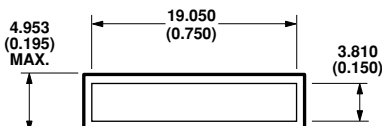
Bar Graph Arrays

Bin ID	Customer Iv in mcd	
	min	max
AlGaAs Red/HLCP-J100 		
GaP Red/GaP Yellow/GaP Green   		
HDSP-4830/4840/4850		
D	0.61	1.11
E	0.91	1.67
F	1.37	2.51
G	2.05	3.76
H	3.08	5.64
I	4.62	8.64

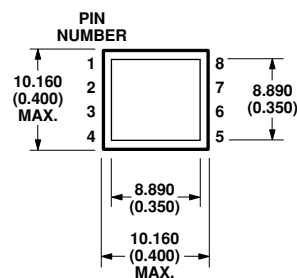
LED Light Bar and Bar Graph Array Package Dimension Drawings



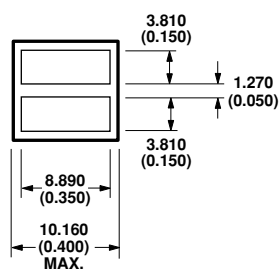
HLCP-A100
HLMP-2300/2400/2500



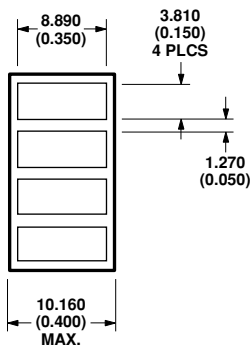
HLCP-B100
HLMP-2x50



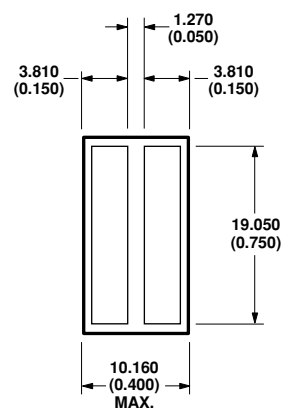
HLCP-C100
HLMP-2x55



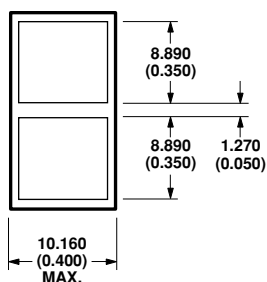
HLCP-D100
HLMP-2600/2700/2800



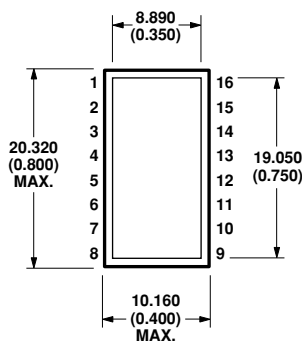
HLCP-E100
HLMP-2x20



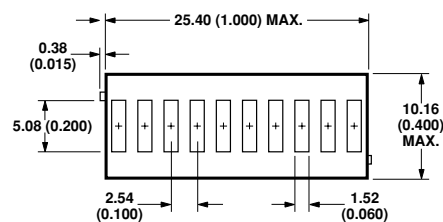
HLCP-F100
HLMP-2x35



HLCP-G100
HLMP-2x70



HLCP-H100
HLMP-2x85



HLCP-J100
HDSP-48x0

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