Agilent Technologies
Innovating the HP Way

LED Thru Hole Lamps

Standard Lamps

3 mm

Stock No.	Mfr.'s Type	Color	Lens	Luminous Intensity	Viewing Angle	EACH 1-499
782-0010	HLMP-K101	AlGaAs	Diffused	45.0 mcd @ 20 mA	60°	.20
782-0135	HLMP-K105	AlGaAs	Clear	65.0 mcd @ 20 mA	45°	.17
782-0137	HLMP-K401	Orange	Diffused	5.5 mcd @ 10 mA	60°	.17
782-0015	HLMP-1301	HER	Diffused	5.5 mcd @ 10 mA	60°	.17
782-0020	HLMP-1401	Yellow	Diffused	6.0 mcd @ 10 mA	60°	.18
782-1503	HLMP-1503	Green	Diffused	5.0 mcd @ 10 mA	60°	.16
782-0210	HLMP-1321	HER	Diffused	30.0 mcd @ 10 mA	45°	.17
782-0220	HLMP-1521	Green	Diffused	22.0 mcd @ 10 mA	45°	.21

5 mm

Stock No.	Mfr.'s Type	Color	Lens	Luminous Intensity	Viewing Angle	EACH 1-499
782-0055	HLMP-D101	AlGaAs	Diffused	70.0 mcd @ 20 mA	65°	.24
782-0057	HLMP-D401	Orange	Diffused	7.0 mcd @ 10 mA	60°	.12
782-0060	HLMP-3301	HER	Diffused	7.0 mcd @ 10 mA	60°	.12
782-0065	HLMP-3401	Yellow	Diffused	8.0 mcd @ 10 mA	60°	.29
782-0070	HLMP-3507	Green	Diffused	5.2 mcd @ 10 mA	60°	.24

High Performance Lamps

3 mm

Stock No.	Mfr.'s Type	Color	Lens	Luminous Intensity	Viewing Angle	EACH 1-499
782-7800	HLMP-NL06	Amber	Clear	220.0 mcd @ 20 mA	60°	.18
782-7801	HLMP-NH04	Red-Orange	Clear	210.0 mcd @ 20 mA	60°	.17
782-6134	HLMA-KH00	Red-Orange	Clear	200.0 mcd @ 20 mA	45°	.45
782-6132	HLMA-KL00	Amber	Clear	200.0 mcd @ 20 mA	45°	.59

Surface Mount LEDs

Subminiature Solid State Lamps

Stock No.	Mfr.'s Type	Color	Package Size	Lens	Luminous Intensity	Forward Voltage	EACH 1-499
782-0120	HLMP-6300	HER	1.7 mm	Diffused	10 mcd @ 10 mA	1.8 V (10 mA)	.21
782-0125	HLMP-6400	Yellow	1.7 mm	Diffused	3 mcd @ 10 mA	2.0 V (10 mA)	.24
782-0130	HLMP-6500	Green	1.7 mm	Diffused	3 mcd @ 10 mA	2.1 V (10 mA)	.24

Surface Mount Chip LEDs

Stock No.	Mfr.'s Type	Color	Footprint	Luminous Intensity	Forward Voltage	Viewing Angle	EACH 1-499
782-6150	HSMS-C650	HER	3.2 × 1.60 mm	5 mcd @ 20 mA	1.9 V @ 20 mA	155°	.23
782-6162	HSMY-C650	Yellow	3.2 × 1.60 mm	5 mcd @ 20 mA	2.1 V @ 20 mA	155°	.32
782-6164	HSMG-C650	Green	3.2 × 1.60 mm	9 mcd @ 20 mA	2.2 V @ 20 mA	155°	.30
782-6168	HSMS-C670	HER	2.0 × 1.25 mm	5 mcd @ 20 mA	1.9 V @ 20 mA	155°	.23
782-6172	HSMY-C670	Yellow	2.0 × 1.25 mm	5 mcd @ 20 mA	2.1 V @ 20 mA	155°	.23
782-6174	HSMG-C670	Green	2.0 × 1.25 mm	9 mcd @ 20 mA	2.2 V @ 20 mA	155°	.32

Surface Mount Flip Chip LEDs

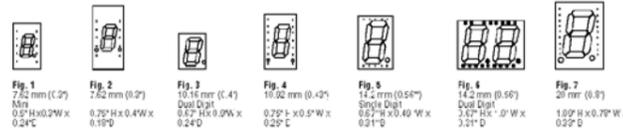| Stock No.	Mfr.'s Type	Color	Footprint	Luminous Intensity	Forward Voltage	Viewing Angle	EACH 1-499
782-8200	HSMG-C170	Green	2.0 × 1.25 × 1.1 mm	9 mcd @ 20 mA	2.3 V @ 20 mA	165°	.31
782-0190	HSMS-C190	HER	1.6 × 0.80 × 0.6 mm	5 mcd @ 20 mA	2.0 V @ 20 mA	165°	.07
782-6110	HSMG-C110	Green	2.1 × 1.30 × 0.7 mm	9 mcd @ 20 mA	2.3 V @ 20 mA	165°	.10
782-6260	HSMG-C260	Green	3.2 × 1.25 × 1.1 mm	9 mcd @ 20 mA	2.3 V @ 20 mA	165°	.14

LED Light Bars
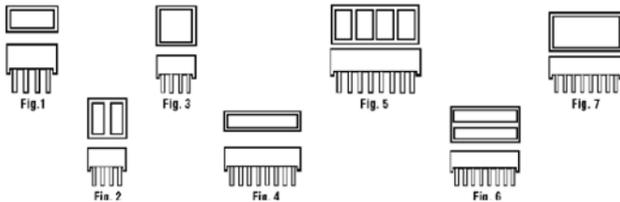
LED light bars designed for fixed message annunciation. All are configured in a dual-in-line DIP package except types HLMP-2300, -2350, -2400, -2450, -2500, -2550 which are SIP packages. Each of the eight X-Y stackable package styles offers one, two or four large, uniformly illuminated light emitting surfaces. 0.100" centers; flush mountable. Available in high-efficiency red, yellow and high-performance green colors. Diffused lens. Ideal use for backlighting legends or simple indicators. For panel and legend mount capabilities, order corresponding part separately in table below. Replace the X in stock number with following color code: 1 — red; 2 — yellow; 3 — green.

Stock No.	H. E. Red* HLMP-	Yellow HLMP-	Green HLMP-	Fig.	No. of Pins	Device Size L × W × H	Light Emitting Areas No.	Light Emitting Areas Size	EACH 1-99
782-069X	2300	2400	2500	1	4	0.400 × 0.195 × 0.245"	1	0.350 × 0.150"	1.11
782-075X	2600	2700	2800	2	8	0.400 × 0.400 × 0.245"	2	0.350 × 0.150"	1.55
782-090X	2655	2755	2855	3	8	0.400 × 0.400 × 0.245"	1	0.350 × 0.350"	1.52
782-070X	2350	2450	2550	4	8	0.800 × 0.195 × 0.245"	1	0.750 × 0.150"	2.05
782-080X	2620	2720	2820	5	16	0.800 × 0.400 × 0.245"	4	0.350 × 0.150"	2.33
782-085X	2635	2735	2835	6	16	0.800 × 0.400 × 0.245"	2	0.150 × 0.750"	2.39
782-100X	2685	2785	2885	7	16	0.800 × 0.400 × 0.245"	1	0.350 × 0.750"	2.94

*H.E. = High efficiency.

Seven-Segment Right-Hand Decimal Point Displays

Fig. 1 — 7.62 mm (C.3") Mini, 0.9" H x 0.9" W x 0.24" C
Fig. 2 — 7.62 mm (0.3") Dual Digit, 0.75" H x 0.4" W x 0.18"D
Fig. 3 — 10.16 mm (C.4") Single Digit, 0.62" H x 0.9" W x 0.24"D
Fig. 4 — 10.92 mm (0.43") Single Digit, 0.75" H x 0.5" W x 0.25" C
Fig. 5 — 14.2 mm (0.56") Dual Digit, 0.62" H x 0.49 "W x 0.21"D
Fig. 6 — 14.2 mm (0.56") Dual Digit, 0.62" HX 1 .0" W x 0.21"D
Fig. 7 — 20 mm (0.8") Single Digit, 1.00" H x 0.79" W > 0.33"D

Solid-state LED numeric displays for applications such as instruments, weighing scales, meters and point-of-sale terminals. Dual-in-line package. Available in character sizes from 7.62 mm (0.3") to 20 mm (0.8") and colors, red, AlGaAs deep red, high-efficiency red (HER in tables below), yellow and high-performance green, AlGaAs displays are tested and selected for their excellent low current characteristics to ensure that the segments match at low currents. Type numbers ending in "1" are common anode; Type numbers ending in "3" and "0" are common cathode.

Stock No.	Mfr.'s Type	Fig.	Color	Typical Intensity Per Segment	EACH 1-49
782-0320	HDSP-7501	1	High Efficiency Red	980 μcd @ 5 mA	1.97
782-0325	HDSP-7503	1	High Efficiency Red	980 μcd @ 5 mA	1.97
782-1020	HDSP-U301	1	Yellow	480 μcd @ 5 mA	2.20
782-0345	HDSP-7803	1	Green	3000 μcd @ 10 mA	1.99
782-0340	HDSP-7801	1	Green	6800 μcd/seg. @ 20 mA DC	1.99
782-0360	5082-7611	2	High Efficiency Red	800 μcd @ 5 mA	2.18
782-0365	5082-7613	2	High Efficiency Red	800 μcd @ 5 mA	1.99
782-0390	HDSP-3601	2	Green	2700 μcd @ 10 mA	2.25
782-6082	HDSP-F501	3	Green	3500 μcd @ 10 mA	1.92
782-0420	5082-7651	4	High Efficiency Red	1115 μcd @ 5 mA	2.88
782-0425	5082-7653	4	High Efficiency Red	1115 μcd @ 5 mA	2.04
782-0480	HDSP-H101	5	AlGaAs Red	700 μcd @ 1 mA	2.17
782-0485	HDSP-H103	5	AlGaAs Red	700 μcd @ 1 mA	2.06
782-0490	HDSP-5501	5	High Efficiency Red	2800 μcd @ 10 mA	2.43
782-0495	HDSP-5503	5	High Efficiency Red	2800 μcd @ 10 mA	2.48
782-0520	HDSP-5701	5	Yellow	1800 μcd @ 10 mA	2.00
782-0540	HDSP-5601	5	Green	2500 μcd @ 10 mA	1.60
782-0545	HDSP-5603	5	Green	500 μcd @ 10 mA	1.78
782-0500	HDSP-5521	6	High Efficiency Red	2800 μcd @ 10 mA	2.80
782-0530	HDSP-5721	6	Yellow	1800 μcd @ 10 mA	2.59
782-0575	HDSP-3903	7	High Efficiency Red	7000 μcd @ 100 mA 1/5df	3.01

9

Alphanumeric LED Display
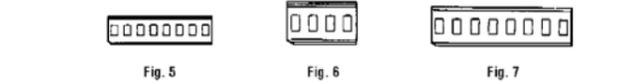
Solid-state alphanumeric LED displays are available in 16 segment and 5 × 7 dot matrix fonts. A low power on-board CMOS IC contains all control logic and drive circuitry for these "smart" displays. HPDL-1414 and HPDL-2416 decode 64 ASCII characters in a "British Flag" layout; types HDLR-, HDLO-, HDLA- and HDLG-2416 decode 128 ASCII characters in a pleasing dot matrix font. Types HDSP-2107 and HDSP-2110 through –2113 decode 128 ASCII characters, have an on-board RAM that stores up to 16 user-definable characters, and feature display blinking, multi-level dimming, and self test. The HCMS-2961 through -2975 serial-input displays are dot-addressable to support nearly unlimited user-defined symbols. All of these devices are ideal for a variety of applications in avionics, control, instrumentation, and telecommunications.

Stock No.	Mfr.'s Type	Fig.	Color	Description	EACH 1-99
782-0600	HPDL-1414†	1	Red	†2.85 mm (0.112") ‡4.1 mm (0.16") 4 Character, 16 Segment, Monolithic Smart, Alphanumeric Display, Operating Temperature Range: –40°C to +85°C	16.34
782-0615	HDLO-2416	2	HER*	5.00 mm (0.20") 5 × 7 Dot Matrix, 4 Character Smart	19.30
782-0635	HDSP-2112	3	HER*	5.00 mm (0.20") 5 × 7 Flexible Dot Matrix 19.6 mm (0.77") Package Height 8 Character Smart, Parallel Input, Decodes 128 ASCII Characters	43.85
782-0645	HDSP-2111	3	Yellow		43.30
782-0650	HDSP-2113	3	Green		45.58
782-0695	HDSP-2502	4	HER*	7.00 mm (0.27") 5 × 7 Flexible Dot Matrix 19.6 mm (0.77") Package Height 8 Character Smart, Parallel Input, Decodes 128 ASCII Characters	45.68
782-0715	HDSP-2534	5	AlGaAs Red	4.57 mm (0.18") 5 × 7 Flexible Dot Matrix 11.4 mm (0.45") Slimline Package Height 8 Character Smart, Parallel Input, Decodes 128 ASCII Characters	51.63
782-0720	HDSP-2532	5	HER*		41.71
782-0730	HDSP-2531	5	Yellow		41.71
782-0735	HDSP-2533	5	Green		45.05
782-0755	HCMS-2961	6	Yellow	5.00 mm (0.20") 5 × 7 Dot Matrix 4 Character Smart, Serial Input, Individual Dot Control	26.47
782-0760	HCMS-2963	6	Green		20.84
782-0770	HCMS-2972	7	HER*	5.00 mm (0.20") 5 × 7 Flexible Dot Matrix 8 Character Smart, Serial Input, Individual Dot Control	49.12
782-0775	HCMS-2974	7	Orange		41.71

*High efficiency red.