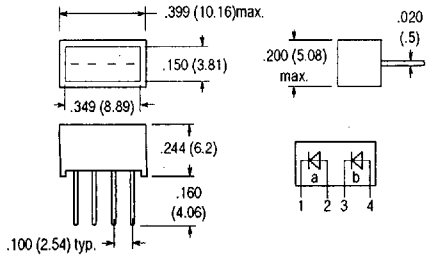
SIEMENS SUPER-RED HLMP-2300/-2600 Series
YELLOW HLMP-2400/-2700 Series
GREEN HLMP-2500/-2800 Series

LED Light Bars

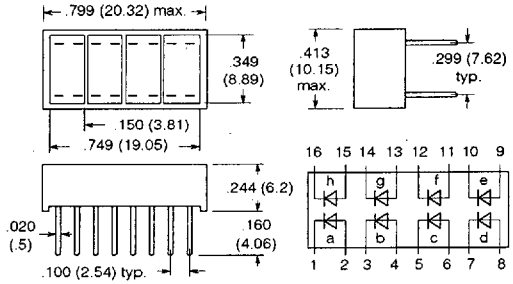
Package Dimensions in Inches (mm)

HLMP-2300, -2400, -2500



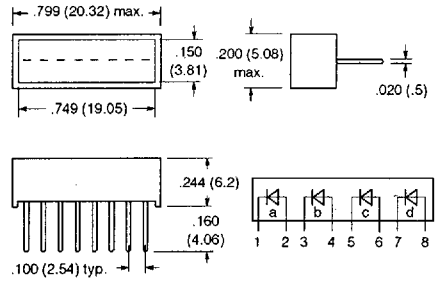
Light emitting area: .350 x .149 (8.9 x 3.8)

HLMP-2620, -2720, -2820



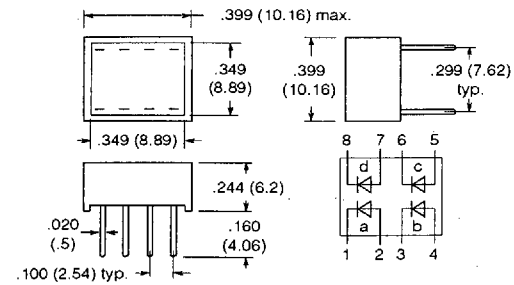
Light emitting area: .747 x .350 (19.0 x 8.9)

HLMP-2350, -2450, -2550



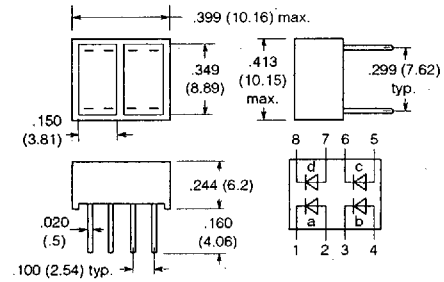
Light emitting area: .747 x .149 (19.0 x 3.8)

HLMP-2655, -2755, -2855



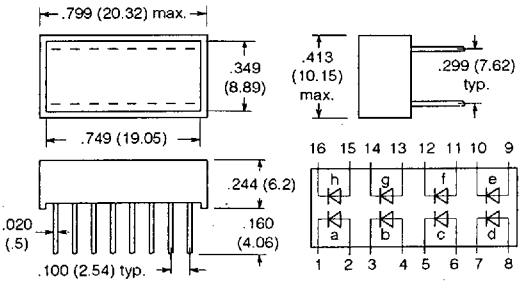
Light emitting area: .350 x .350 (8.9 x 8.9)

HLMP-2600, -2700, -2800



Light emitting area: .350 x .350 (8.9 x 8.9)

HLMP-2685, -2785, -2885



Light emitting area: .747 x .350 (19.0 x 8.9)

FEATURES

- **Large Bright, Uniform Light Emitting Areas**
- **Excellent On-Off Contrast**
- **Mounts Easily on PC Boards or Industry Standard SIP/DIP Sockets**
- **X-Y Stackable**
- **Suitable for Multiplex Operation**
- **IC Compatible**

See graph numbers 1E, 2A, 3F, 5A, 6G, 8N, 9L, 10H, 11D at the end of this section.

Maximum Ratings

Operating Temperature Range (T_{OP}).....-20°C to +85°C
Storage Temperature Range (T_{STG}).....-40°C to +85°C
Lead Soldering Temperature,
1.6 mm from base (T_S) t=3 s .....260°C
Peak Forward Current/LED Chip (I_{FPEAK}),
T_A=50°C, t_P=2 ms
Super-Red, Green .....90 mA
Yellow .....60 mA
Time Average Forward Current/LED Chip, T_A=25°C
Super-Red, Green .....25 mA
Yellow .....20 mA
Reverse Voltage/LED Chip (V_R) .....6 V
DC Forward Current/LED Chip (IF), T_A=50°C
Super-Red, Green .....30 mA
Yellow .....25 mA
Average Power Dissipation (P_{TOT}) T_A=25°C
Super-Red, Green .....135 mW
Yellow .....85 mW

Notes:
1. Super-red and green: derate above T_A=25°C at 1.8 mW/°C per LED chip. Yellow: T_A=50°C at 1.8 mW/°C per LED chip. See Figure 2.
2. See Figure 1 for pulsed operating conditions.
3. Super-red and green: derate above T_A=50°C at 0.50 mA/°C per LED chip. Yellow: T_A=60°C at 0.50 mA/°C per LED chip. See Figure 3.

Super-Red Characteristics (T_A=25°C)

Parameter	Symbol	Values Min.	Typ	Unit
Peak Wavelength	λ_{PEAK}		635	nm
Dominant Wavelength	λ_{DOM}		626	nm
Forward Voltage				
I_F=20 mA	V_F		2.0	V
Breakdown Voltage				
I_R=100 µA	V_R	6	15	V
Thermal Resistance	R_{thJA}		150	K/W per LED chip
Luminous Intensity per Light Emitting Area				
HLMP2300				
I_F=20 mA	I_V	6	23	mcd
I_F=60 mA PK:1:3	I_V		26	mcd
HLMP2350				
I_F=20 mA	I_V	13	45	mcd
I_F=60 mA PK:1:3	I_V		52	mcd
HLMP2600				
I_F=20 mA	I_V	6	22	mcd
I_F=60 mA PK:1:3	I_V		25	mcd
HLMP2620				
I_F=20 mA	I_V	6	25	mcd
I_F=60 mA PK:1:3	I_V		29	mcd
HLMP2655				
I_F=20 mA	I_V	13	43	mcd
I_F=60 mA PK:1:3	I_V		49	mcd
HLMP2685				
I_F=20 mA	I_V	22	80	mcd
I_F=60 mA PK:1:3	I_V		92	mcd

Yellow Characteristics (T_A=25°C)

Parameter	Symbol	Values Min.	Typ	Unit
Peak Wavelength	λ_{PEAK}		583	nm
Dominant Wavelength	λ_{DOM}		585	nm
Forward Voltage				
I_F=20 mA	V_F		2.1	V
Breakdown Voltage				
I_R=100 µA	V_R	6	15	V
Thermal Resistance	R_{thJA}		150	K/W per LED chip
Luminous Intensity per Light Emitting Area				
HLMP2400				
I_F=20 mA	I_V	6	20	mcd
I_F=60 mA PK:1:3	I_V		24	mcd
HLMP2450				
I_F=20 mA	I_V	13	38	mcd
I_F=60 mA PK:1:3	I_V		46	mcd
HLMP2700				
I_F=20 mA	I_V	6	18	mcd
I_F=60 mA PK:1:3	I_V		22	mcd
HLMP2720				
I_F=20 mA	I_V	6	18	mcd
I_F=60 mA PK:1:3	I_V		22	mcd
HLMP2755				
I_F=20 mA	I_V	13	35	mcd
I_F=60 mA PK:1:3	I_V		43	mcd
HLMP2785				
I_F=20 mA	I_V	26	70	mcd
I_F=60 mA PK:1:3	I_V		85	mcd

Green Characteristics (T_A=25°C)

Parameter	Symbol	Values Min.	Typ	Unit
Peak Wavelength	λ_{PEAK}		565	nm
Dominant Wavelength	λ_{DOM}		572	nm
Forward Voltage				
I_F=20 mA	V_F		2.2	V
Breakdown Voltage				
I_R=100 µA	V_R	6	15	V
Thermal Resistance	R_{thJA}		150	K/W per LED chip
Luminous Intensity per Light Emitting Area				
HLMP2500				
I_F=20 mA	I_V	5	25	mcd
I_F=60 mA PK:1:3	I_V		28	mcd
HLMP2550				
I_F=20 mA	I_V	11	50	mcd
I_F=60 mA PK:1:3	I_V		56	mcd
HLMP2800				
I_F=20 mA	I_V	5	25	mcd
I_F=60 mA PK:1:3	I_V		28	mcd
HLMP2820				
I_F=20 mA	I_V	5	25	mcd
I_F=60 mA PK:1:3	I_V		28	mcd
HLMP2855				
I_F=20 mA	I_V	11	50	mcd
I_F=60 mA PK:1:3	I_V		56	mcd
HLMP2885				
I_F=20 mA	I_V	22	100	mcd
I_F=60 mA PK:1:3	I_V		11	mcd