

HER YELLOW GREEN HLMP-M200/M201 HLMP-M300/M301 HLMP-M500/M501 HLMP-M250/M251 HLMP-M350/M351 HLMP-M550/M551

# **PACKAGE DIMENSIONS** .100 (2.54) .050 (1.27) .246 (6.24) .226 (5.74) 1.00 (25.4) MIN .050 (1.27) .050 (1.27) REF. 100 (2.54) DIA .162 (4.11) .152 (3.86) .100 (2.54) .020 (0.50) **INDICATES** SQ. TYP. (2X) CATHODE

#### **FEATURES**

- · Wide viewing angle
- · Excellent for backlighting small areas
- · Solid state reliability
- Choice of tinted clear or tinted diffused package



### **DESCRIPTION**

Bright illumination and wide viewing angle are two outstanding features of the 4 mm flat top lamps. The cylindrical shape and flat emitting surface make these lamps particularly well suited for applications requiring high light output in minimal space.

NOTES: ALL DIMENSIONS ARE IN INCHES (mm).

ABSOLUTE MAXIMUM RATING (TA =25°C)						
Parameters	HER	YELLOW	GREEN	UNITS		
Power Dissipation	135	120	135	mW		
Peak Forward Current						
(1 μS pulse width, 0.3% duty cycle)	90	60	90	mA		
Reverse Voltage	5	5	5	V		
Lead Soldering Time at 260° C	5	5	5	sec		
Continuous Forward Current	30	20	30	mA		
Operating Temperature	-55 to +100	-55 to +100	-55 to +100	°C		
Storage Temperature	-55 to +100	-55 to +100	-55 to +100	°C		



ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)						
	HER	YELLOW	GREEN			
Pararmeter	HLMP-M200/M201	HLMP-M300/M301	HLMP-M500/M501	Condition		
Luminous Intensity (mcd)				$I_F = 20mA$		
Minimum	3.4 / 5.4	3.6 / 5.7	4.2 / 6.7			
Typical	5.0 / 7.0	5.0 / 7.0	7.0 / 10.0			
Forward Voltage (V)				$I_F = 20mA$		
Maximum	3.0	3.0	3.0			
Typical	2.2	2.2	2.3			
Peak Wavelength (nm)	635	585	565	$I_F = 20mA$		
Reverse Voltage (V)	5	5	5	$I_R = 100 \mu A$		
Viewing Angle (°)	135	135	135	$I_F = 20mA$		

ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)						
	HER	YELLOW	GREEN			
Pararmeter	HLMP-M250/M251	HLMP-M350/M351	HLMP-M550/M551	Condition		
Luminous Intensity (mcd)				$I_F = 10mA$		
Minimum	3.4 / 5.4	3.6 / 5.7	4.2 / 6.7			
Typical	5.0 / 7.0	5.0 / 7.0	10.0 / 16.0			
Forward Voltage (V)				$I_F = 20mA$		
Maximum	3.0	3.0	3.0			
Typical	2.2	2.2	2.3			
Peak Wavelength (nm)	635	585	565	$I_F = 10mA$		
Reverse Voltage (V)	5	5	5	$I_R = 100 \mu A$		
Viewing Angle (°)	80	80	80	$I_F = 10mA$		



### TYPICAL PERFORMANCE CURVES (TA =25°C)

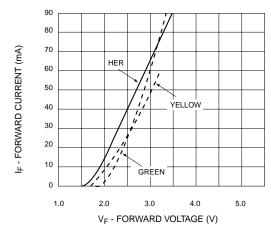


Fig. 1 Forward Current vs. Forward Voltage

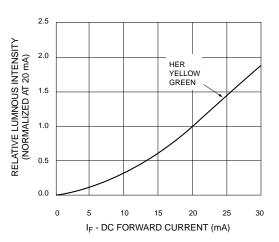


Fig. 2 Relative Luminous Intensity vs.
DC Forward Current

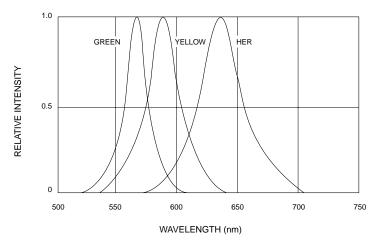
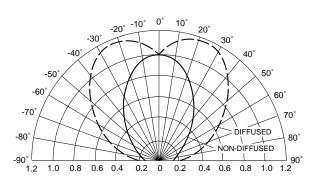


Fig. 3 Relative Intensity vs. Peak Wavelength



REL. LUMINOUS INTENSITY (%)

Fig.4 Radiation Diagram

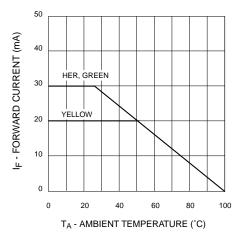


Fig. 5 Current Derating Curve

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