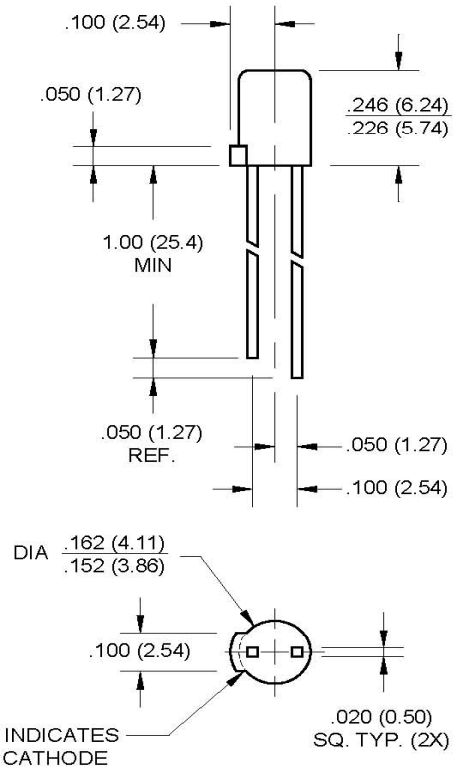
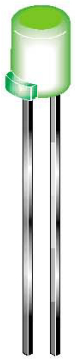
4 mm FLAT TOP LAMPS

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

PACKAGE DIMENSIONS



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 (T_A =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

4 mm FLAT TOP LAMPS

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

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

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

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

4 mm FLAT TOP LAMPS

TYPICAL PERFORMANCE CURVES (T_A =25°C)

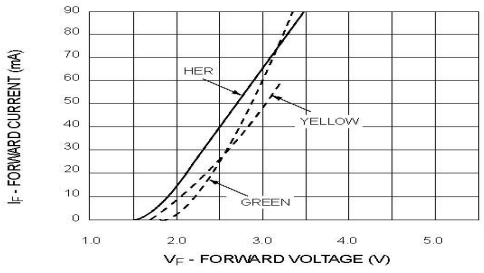


Fig. 1 Forward Current vs. Forward Voltage

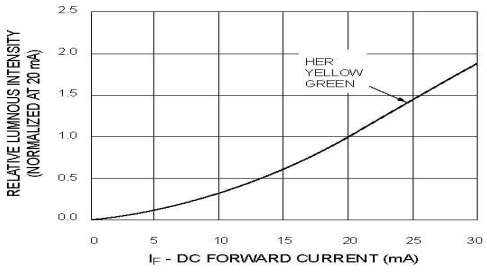


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

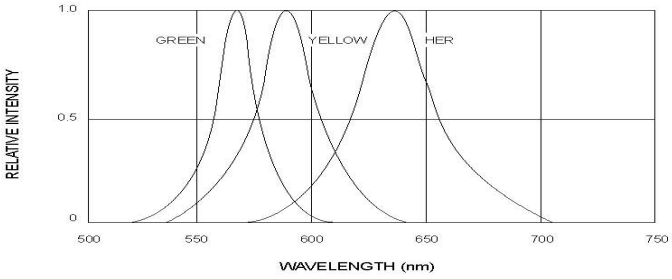


Fig. 3 Relative Intensity vs. Peak Wavelength

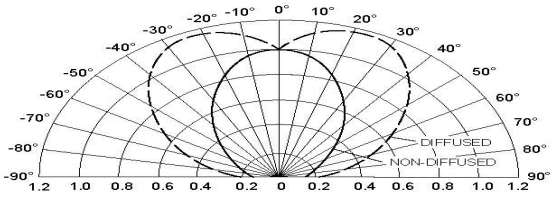


Fig.4 Radiation Diagram

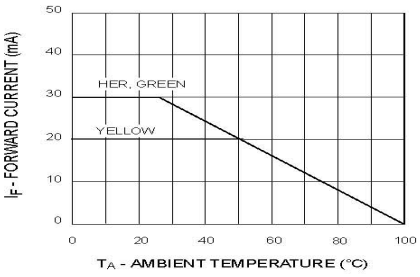


Fig. 5 Current Derating Curve

4 m m FLAT TOP LAMPS

DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE PRESIDENT OF FAIRCHILD SEMICONDUCTOR CORPORATION. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical the body,or (b) support or sustain life, whose failure to perform when properly support used in accordance with instructions for use provided In labeling, can be reasonably expected to result in a significant injury of the user.

2. A critical component in any component of a life support device or system whose failure to perform can be implant into reasonably expected to cause the failure of the life and (c) device or system, or to affect its safety or effectiveness.