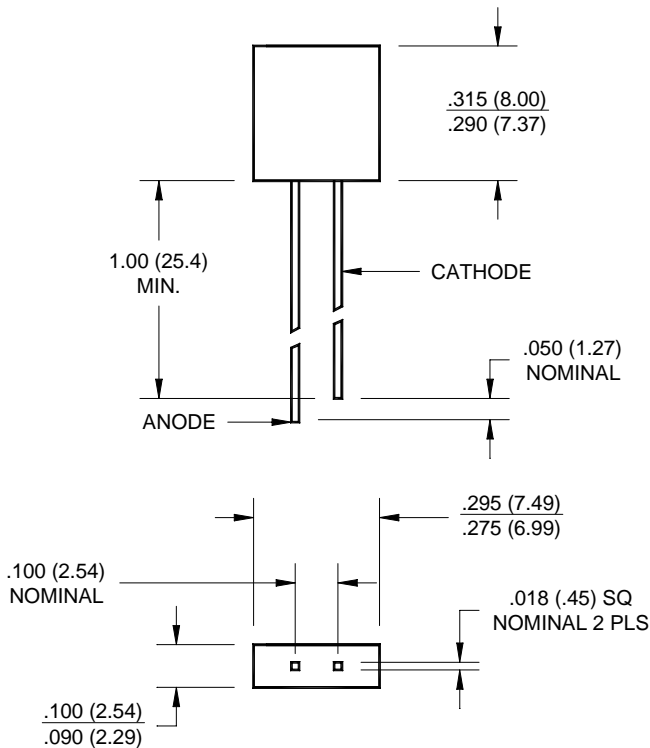


HIGH EFFICIENCY RED HLMP- 0300/1
YELLOW HLMP- 0400/1
HIGH EFFICIENCY GREEN HLMP- 0503/4

PACKAGE DIMENSIONS

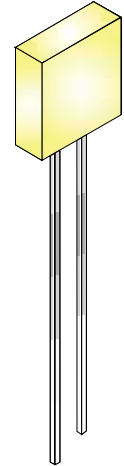


NOTES:

1. ALL DIMENSIONS ARE IN INCHES (mm).
2. TOLERANCES ARE ± 0.010 " INCH UNLESS SPECIFIED.
3. AN EPOXY MENISCUS MAY EXTEND ABOUT 0.040" (1mm) DOWN THE LEADS.

FEATURES

- Wide viewing angle
- Solid state reliability
- Perfect for panel indicators



DESCRIPTION

The HLMP-0X0X series of rectangular lamps are direct replacements for Agilent's series with the same part numbers. The series is similar to MV5X123 except for the larger lens size. Like the MV5X123, the HLMP-0X0X is stackable. The lamps are tinted and diffused.

ABSOLUTE MAXIMUM RATING (T_A =25°C)

Parameter	HER	YELLOW	HEG	UNITS
Power Dissipation (HLMP-040X=85mA)	135	135	135	mW
Peak Forward Current (1μsec pluse, 0.3% DC)	90	90	60	mA
Continuous DC Forward Current	30	20	30	mA
Lead Soldering Time at 260° C	5	5	5	sec
Operating Temperature	-55 to +100	-55 to +100	-50 to +100	°C
Storage Temperature	-55 to +100	-55 to +100	-50 to +100	°C

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A = 25°C)

Parameter	HER		YELLOW		HEG		Condition
	HLMP- 0300/1	HLMP- 0400/1	HLMP- 0400/1	HLMP- 0503/4	HLMP- 0503/4	HLMP- 0503/4	
Luminous Intensity (mcd)							I _F = 20mA
Minimum	1.0	2.5	1.5	3.0	1.5	2.5	
Typical	2.5	5.0	2.5	5.0	3.0	5.0	
Forward Voltage (V)							I _F = 20mA
Maximum	3.0	3.0	3.0	3.0	3.0	3.0	
Typical	2.1	2.1	2.2	2.2	2.3	2.3	
Peak Wavelength (nm)	635	635	585	585	565	565	I _F = 20mA
Spectral Line Half Width (nm)	45	45	35	35	35	35	I _F = 20mA
Reverse Voltage (V)	5	5	5	5	5	5	I _R = 100μA
Viewing Angle (°)	100	100	100	100	100	100	

TYPICAL PERFORMANCE CURVES ($T_A = 25^\circ\text{C}$)

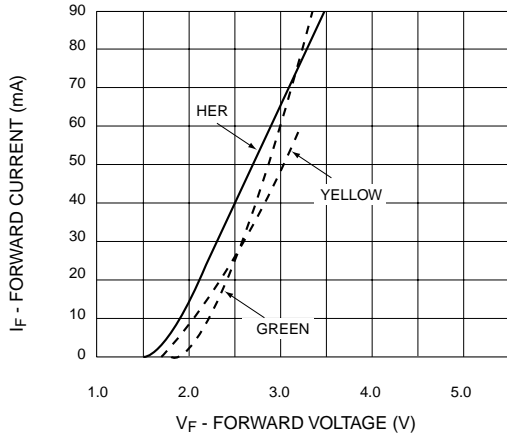


Fig. 1 Forward Current vs. Forward Voltage

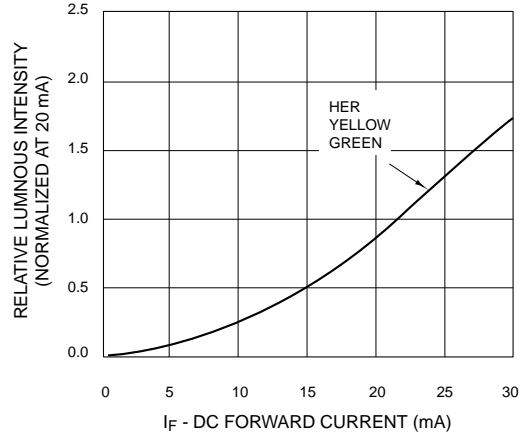


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

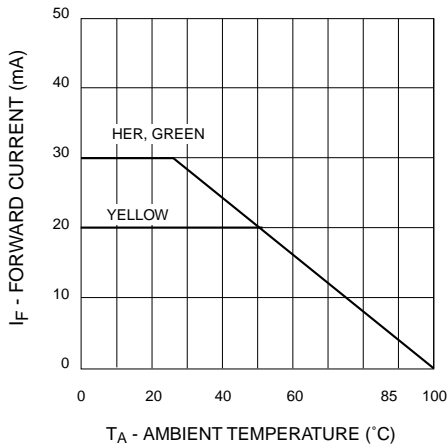


Fig. 3 Current Derating Curve

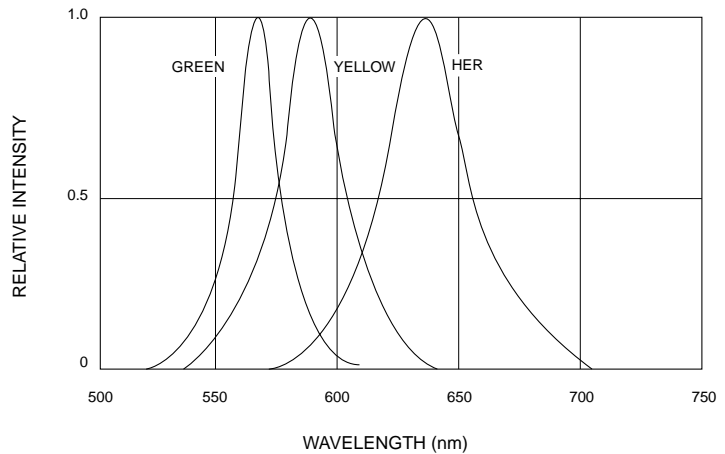


Fig. 4 Relative Intensity vs. Peak Wavelength

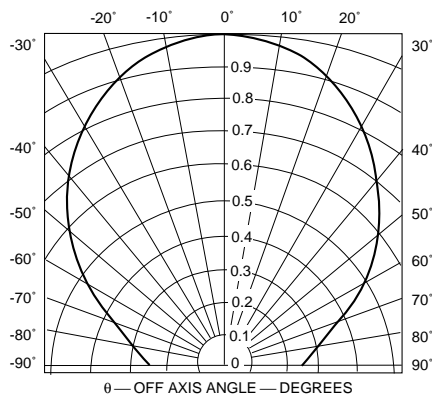


Fig. 5 Spatial Distribution

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 implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly 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 reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.