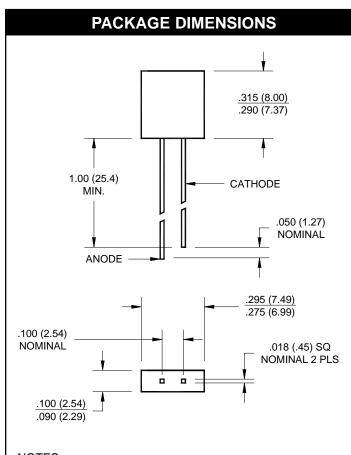


HIGH EFFICIENCY RED HLMP- 0300/1 YELLOW HLMP- 0400/1 HIGH EFFICIENCY GREEN HLMP- 0503/4



### **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.

### 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.

ABSOLUTE MAXIMUM RATING (TA =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



Parameter	HE	HER		YELLOW		EG	
	HLMP-	0300/1	HLMP-	0400/1	HLMP-	0503/4	Condition
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 <sub>F</sub> = 20mA
Spectral Line Half Width (nm)	45	45	35	35	35	35	I <sub>F</sub> = 20mA
Reverse Voltage (V)	5	5	5	5	5	5	$I_{R} = 100 \mu A$
Viewing Angle (°)	100	100	100	100	100	100	

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#### TYPICAL PERFORMANCE CURVES (TA =25°C) 90 2.5 80 RELATIVE LUMNOUS INTENSITY (NORMALIZED AT 20 mA) 2.0 IF - FORWARD CURRENT (mA) 70 HER YELLOW HER 60 1.5 50 YELLOW 1.0 30 20 0.5 10 **GREEN** 0.0 1.0 2.0 4.0 5.0 0 15 20 25 30 3.0 10 V<sub>F</sub> - FORWARD VOLTAGE (V) IF - DC FORWARD CURRENT (mA) Fig. 1 Forward Current vs. Forward Voltage Fig. 2 Relative Luminous Intensity vs. **DC Forward Current** 50 1.0 IF - FORWARD CURRENT (mA) HER GREEN YFI I OW 40 RELATIVE INTENSITY HER, GREEN 30 0.5 YELLOW 20 10 0 0 60 40 85 500 550 650 700 600 750 T<sub>A</sub> - AMBIENT TEMPERATURE (°C) WAVELENGTH (nm) Fig. 3 Current Derating Curve Fig. 4 Relative Intensity vs. Peak Wavelength -20° -10° 10° 20° -30 30° 0.9 0.8 0.7 -40° 0.6 0.5 -50 50° -60 60° -70° 70° -80 80° -90° OFF AXIS ANGLE

Fig. 5 Spatial Distribution



#### **DISCLAIMER**

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- 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.