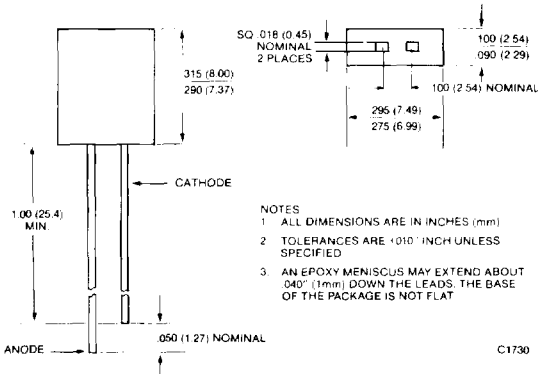


**HIGH EFFICIENCY RED HLMP-0300/1
YELLOW HLMP-0400/1
HIGH EFFICIENCY GREEN HLMP-0503/4**

PACKAGE DIMENSIONS



DESCRIPTION

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

FEATURES

- 3 High Efficiency colors
- Rectangular light area
- Inexpensive panel indicators

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PHYSICAL CHARACTERISTICS

DEVICE	SOURCE COLOR	LENS COLOR	LENS EFFECT	I_v MIN. AT 20 mA
HLMP-0300	High Efficiency Red	Red Diffused	Very Wide Beam	1.0
HLMP-0301	High Efficiency Red	Red Diffused	Very Wide Beam	2.5
HLMP-0400	Yellow	Yellow Diffused	Very Wide Beam	1.5
HLMP-0401	Yellow	Yellow Diffused	Very Wide Beam	3.0
HLMP-0503	High Efficiency Green	Green Diffused	Very Wide Beam	1.5
HLMP-0504	High Efficiency Green	Green Diffused	Very Wide Beam	3.0

HLMP-0300/1 HLMP-0400/1 HLMP-0503/4

ELECTRO-OPTICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)										
PARAMETER	SYMBOL	HLMP-						UNITS	TEST CONDITIONS	
		HI. EFF. RED		YELLOW		HI. EFF. GREEN				
		0300	0301	0400	0401	0503	0504			
Luminous Intensity	min.	I_v	1.0	2.5	1.5	3.0	1.5	2.5	mcd	$I_f = 20 \text{ mA}$
	typ.		2.5	5.0	2.5	5.0	3.0	5.0	mcd	$I_f = 20 \text{ mA}$
Forward voltage	max.	V_f	3.0	3.0	3.0	3.0	3.0	3.0	V	$I_f = 20 \text{ mA}$
	typ.		2.1	2.1	2.2	2.2	2.3	2.3	V	$I_f = 20 \text{ mA}$
Peak wavelength	typ.	λ_p	635	635	585	585	565	565	nm	$I_f = 20 \text{ mA}$
Spectral line half width	typ.	$\Delta\lambda/2$	45	45	35	35	35	35	nm	$I_f = 20 \text{ mA}$
Capacitance	typ.	C	45	45	45	45	20	20	pF	$V_f = 0, f = 1 \text{ MHz}$
Reverse breakdown voltage	min.	BV_r	5	5	5	5	5	5	V	$I_r = 100 \mu\text{A}$
Total viewing angle between half Luminous Intensity points	typ.	$2\theta_{1/2}$	100	100	100	100	100	100	degrees	

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)	
Power dissipation at 25°C ambient (HLMP-040X=85 mA)	135 mW
Derate linearly from 25°C	1.6 mW/ $^\circ\text{C}$
Storage and operating temperatures	-55°C to $+100^\circ\text{C}$
Lead soldering time at 260°C (See Note 1)	5 sec.
Continuous forward current at 25°C (HLMP-040X=20 mA)	30 mA
Peak forward current (1 μsec pulse, 0.3% DC) (HLMP-040X=60 mA)	90 mA

HLMP-0300/1 HLMP-0400/1 HLMP-0503/1