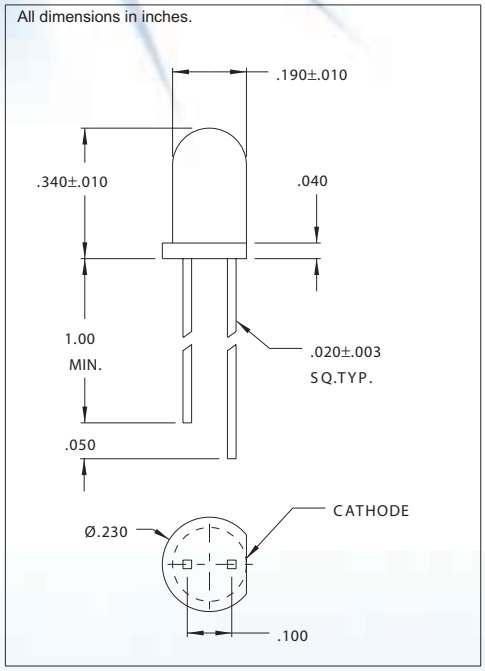
CML INNOVATIVE TECHNOLOGIES
WHERE INNOVATION COMES TO LIGHT

T-1 3/4 General Purpose LED Lamps

DESCRIPTION AND FEATURES



The HLMP33XX series are direct replacements for Hewlett Packard's HLMP33XX series. The FLV110 is a direct replacement for Fairchild's FLV110. These LED lamps are available with wide or narrow viewing angles for direct viewing or backlighting. The standard red lamp is produced with GaAsP and the High Efficiency Red lamps are produced with GaAsP/GaP. Lamps are available either diffused or non-diffused.

ELECTRO-OPTICAL CHARACTERISTICS AND RATINGS

PART NUMBER	HLMP3300	HLMP3301	HLMP3315	HLMP3316	FLV110
Output Color	H.E. Red	H.E. Red	H.E. Red	H.E. Red	Red
Diffusion	Diffused	Diffused	Non-Diffused	Non-Diffused	Diffused
Package Color	Red	Red	Red	Red	Red
Test Current (mA)	10	10	10	10	20
Forward Voltage Typ. (V)	2.2	2.2	2.2	2.2	1.6
Forward Voltage Max. (V)	3.0	3.0	3.0	3.0	2.0
Luminous Intensity Min. (mcd)	2.0	4.0	12.0	20.0	0.8
Luminous Intensity Typ. (mcd)	3.5	7.0	18.0	35.0	3.0
Capacitance pF Vr=0, F=1MHz	45	45	45	45	30
Peak Wavelength (nm)	635	635	635	635	665
Viewing Angle 2θ 1/2 (degrees)	65	65	35	35	70
Power Dissipation (mW)	135	135	135	135	135
Operating Temperature (°C)	-55 to +100	-55 to +100	-55 to +100	-55 to +100	-55 to +100
Storage Temperature (°C)	-55 to +100	-55 to +100	-55 to +100	-55 to +100	-55 to +100
Peak Forward Current Max. (1µs @ 0.3% duty cycle) (mA)	90	90	90	90	90
Reverse Voltage (IR=100µA) (V)	5	5	5	5	5
Lead Solder Time @ 260°C	5	5	5	5	5

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America:
CML Innovative Technologies,Inc.
147 Central Avenue
Hackensack -NJ 07601 -USA
Tel:1-201-489 -8989
Fax:1-201-489 -6911
e-mail:americas@cml-it.com

Europe:
CML Technologies GmbH &Co.KG
Robert-Bunsen-Str.1
67098 Bad Dürkheim -GERMANY
Tel:+49 (0)6322 9567-0
Fax:+49 (0)6322 9567-88
e-mail:europe@cml-it.com

Asia:
CML Innovative Technologies,Inc.
61 Aida Street
Singapore 459975
Tel:(65)9630 -5003
e-mail:asia@cml-it.com

CML-IT reserves the right to make specification revisions that enhance the design and/or performance of the product