


4W 940nm Uncooled Multimode Laser Diode Module MU4-940-04

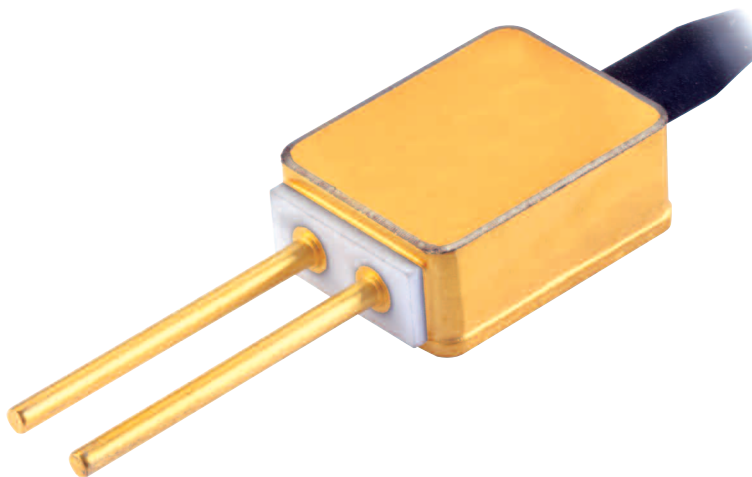
The Bookham MU4-940 multimode laser diode module has been designed to provide the high power and reliability required for pumping next generation high power amplifiers for CaTV and FTTx. The pump module includes a multimode laser diode chip with E2 front mirror passivation that prevents Catastrophic Optical Damage (COD) to the laser diode facet even at very high power levels. The coupling process allows for high output powers that are very stable with both time and temperature.

Features:

- High output power 4W
- 0.22NA 105µm core multimode fiber pigtail
- Hermetically sealed package
- Floating anode/cathode
- High reliability
- Excellent solderability
- Standard wavelength at 940nm
- Low power dissipation
- RoHS compliant 

Applications:

- High power EDFA for CaTV and FTTx
- Er/Yb co-doped double clad pumping



Operating Characteristics:

Conditions unless otherwise stated:

- Parameters at 25°C heat sink temperature and use of a thermal interface material rated for a thermal impedance of less than 1.3cm² .K/W (0.2in² .K/W)

Parameter	Symbol	Min	Typ	Max	Unit
Fiber Coupled CW Output Power	P _{OP}	4.0			W
Operating Current	I _{OP}			5.5	A
Forward Voltage	V _{OP}			2.0	V
Threshold Current	I _{th}		0.5	0.6	A
Slope Efficiency	$\eta_p = P_{OP} / (I_{OP} - I_{th})$	0.8	0.95		W/A
Center Wavelength	λ_{c940}	930	940	950	nm
Spectral Width (95% of Power)	$\Delta\lambda$		6		nm

Absolute Maximum Ratings:

Parameter	Min	Max	Unit
ESD		500	V
Storage Temperature	-40	85	°C
Lead Soldering Temperature		250	°C
Lead Soldering Time		10	sec
Operating Case Temperature	0	45	°C
Relative Humidity (Operating)	5	85	%

Fiber Specification:

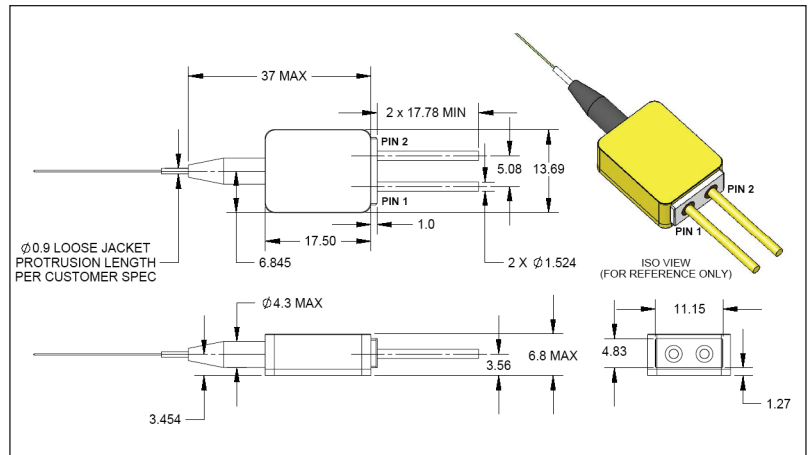
Parameter	Min	Typ	Max	Unit
Buffer Diameter	230	250	270	μm
Cladding Diameter	123	125	128	μm
Core Diameter	102	104	106	μm
Numeric Aperture [1]		0.22		
Fiber Length	1.0	1.5	2.5	m

Notes:

[1] 0.15NA available on request.

Fiber Type: Multimode Step Index.

Package Dimensions (mm):



Connection:

Pin #	Function
1	Laser Diode Anode (+)
2	Laser Diode Cathode (-)

RoHS Compliance



Bookham is fully committed to environment protection and sustainable development and has set in place a comprehensive program for removing polluting and hazardous substances from all of its products. The relevant evidence of RoHS compliance is held as part of our controlled documentation for each of our compliant products. RoHS compliance parts are available to order, please refer to the ordering information section for further details.

Ordering Information:

MU4-940-04
4W 940nm Multimode Laser Diode with 0.22NA fiber

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