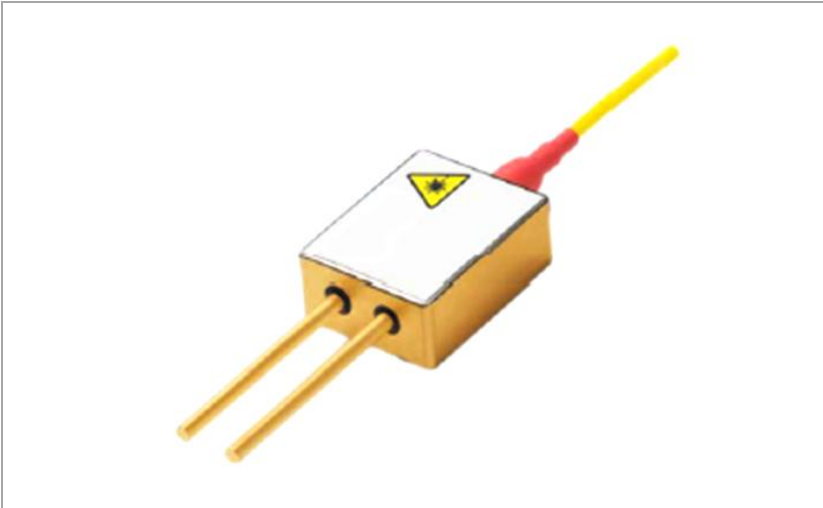


3.5W 808nm Uncooled Multimode Laser Diode Module


BMU4-808/C-02-R01/R02



The II-VI Laser Enterprise BMU4-808/C-02-R01/R02 multimode laser diode module series has been designed to provide the highest power and reliability required for pumping solidstate lasers and for direct applications.

The 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 of min. 3.5W
- 0.22NA 105 μ m core multimode optical fiber
- Hermetically sealed 2-pin package
- Floating anode/cathode
- High reliability
- Fiber protection sleeve and SMA connector
- RoHS compliant 

Applications:

- Solid state laser pumping
- Medical
- Analytical
- Printing

Operating Characteristics

Conditions unless otherwise stated:

Parameters at 25°C heat sink temperature and use of a thermal interface material rated for a thermal contact resistance of less than 1.3cm² K/W. Optical fibre with 105µm core diameter and 0.22NA.

Parameter	Min	Typ	Max	Unit	Conditions
CW Output Power	3.5			W	
Centre Wavelength BMU4-808C-02-R BMU4-808-02-R01 BMU4-808-02-R02	805.5 803 800	808 806 803	810.5 809 806	nm	
Spectral Width (-13dB)		3		nm	
Threshold Current		0.6		A	
Slope Efficiency		0.97		W/A	
Operating Current			4.5	A	
Operating Voltage		2		V	

Absolute Ratings

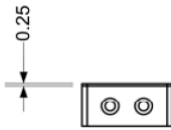
Parameter	Min	Typ	Max	Unit	Conditions
ESD	–		500	V	HBM, C=100pF, R=1.5 kOhm
Storage temperature	-40		85	°C	non-condensing
Lead soldering temperature	–		320	°C	
Lead soldering time	–		10	Sec	
Operating case temperature	15		60	°C	Reliability impacted if operating point deviates from reference condition
Relative humidity	5		85	%	
Fiber bend radius	25			mm	

Fiber Specification

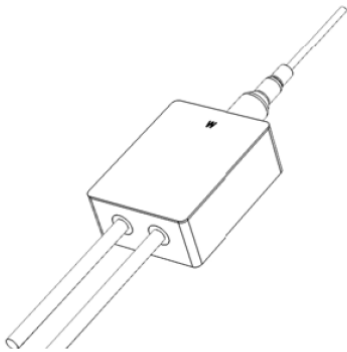
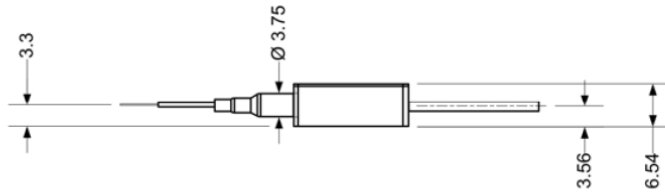
Parameter	Min	Typ	Max	Unit	Conditions
Buffer diameter	230	250	270	µm	
Cladding diameter	123	125	128	µm	
Core diameter	102	105	108	µm	
Numeric aperture	–	0.22	–	–	
Fiber length	–	1.5	–	m	
Fiber protection and connector					Fiber sleeve & SMA905 ceramic ferrule

Package Dimensions (mm)

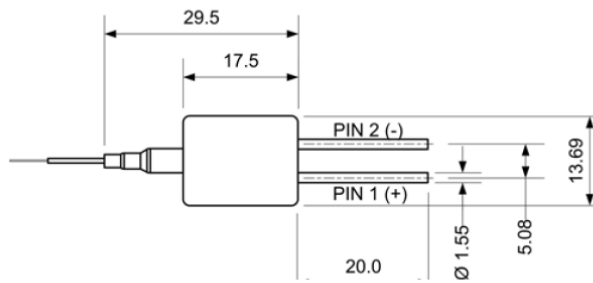
Back View (Pins Side):



Side View:



Top View



Remarks: Mounting clip is available upon request
Drawing does not show protection sleeve and SMA connector

RoHS Compliance



II-VI Laser Enterprise 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:

BMU4-808C-02-R	3.5W 808±2.5nm Multimode Laser Diode Module with 105µm 0.22NA fiber
BMU4-808-02-R01	3.5W 806±3nm Multimode Laser Diode Module with 105µm 0.22NA fiber
BMU4-808-02-R02	3.5W 803±3nm Multimode Laser Diode Module with 105µm 0.22NA fiber

Contact Information

www.laserenterprise.com

Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by II-VI Laser Enterprise before they become applicable to any particular order or contract. In accordance with the II-VI Laser Enterprise policy of continuous improvement specifications may change without notice. Further details are available from any II-VI Laser Enterprise sales representative.

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Caution - use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.