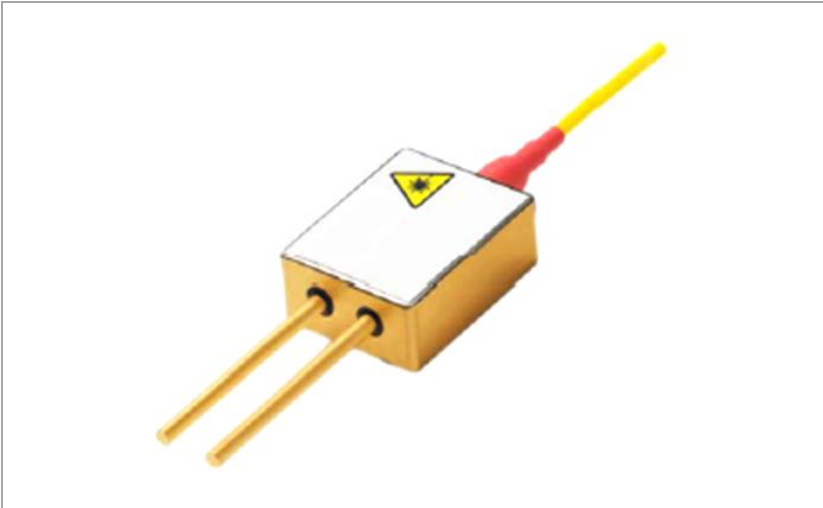


## 8W 9xxnm Uncooled Multimode Laser Diode Module


BMU8-9xx-01/02-R



The II-VI Laser Enterprise BMU8-9xx-01/02-R multimode laser diode module series has been designed to provide the high power and reliability required for pumping next generation solid-state and fibre 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 powers of 8W
- 0.15NA or 0.22NA 105µm core multimode optical fiber
- Hermetically sealed 2-pin package
- Floating anode/cathode
- High reliability
- Excellent solderability
- Standard wavelength at 915, 940, 960, and 975nm (others available on request)
- RoHS compliant 

### Applications:

- Fiber laser pumping
- Direct applications
- Material processing
- Printing
- Medical

## 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 1.3cm<sup>2</sup> K/W. Optical fibre with 105µm core diameter and 0.15NA or 0.22NA.

Parameter	Min	Typ	Max	Unit	Conditions
CW Output Power	8			W	
Centre Wavelength [1]					
BMU8-915-01/02-R	905	915	925	nm	
BMU8-940-01/02-R	930	940	950		
BMU8-960-01/02-R	950	960	970		
BMU8-975-01/02-R	970	975	980		
BMU8-975B-01/02-R	973	976	979		
Spectral Width (-13dB)		6		nm	
Threshold Current		0.5		A	
Slope Efficiency		0.95		W/A	
Operating Current			10	A	
Operating Voltage		1.8		V	

[1] Reduced wavelength window/extended range available on request (900-1070nm).

## Absolute Ratings

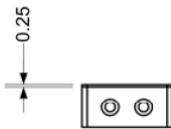
Parameter	Min	Typ	Max	Unit	Conditions
ESD	–		500	V	HBM, C=100pF, R=1.5 kOhm
Storage temperature	-40		85	°C	non-condensing
Lead soldering temperature	–		320	°C	
Lead soldering time	–		10	Sec	
Operating case temperature	15		60	°C	Reliability impacted if operating point deviates from reference condition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

**Fiber Specification**

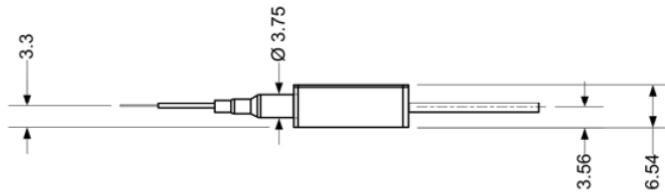
Parameter	Min	Typ	Max	Unit	Conditions
Buffer diameter	230	250	270	μm	
Cladding diameter	123	125	128	μm	
Core diameter	102	105	108	μm	
Numeric aperture	-	0.15	-	-	
	-	0.22	-	-	
Fiber length	-	2	-	m	

**Package Dimensions (mm)**

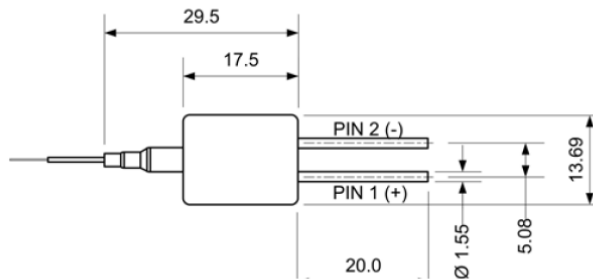
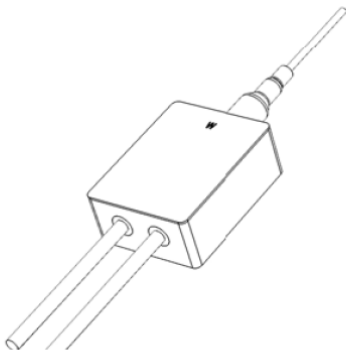
Back View (Pins Side):



Side View:



Top View (Oclaro Label):



Remarks: Mounting clip is available upon request

## 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:

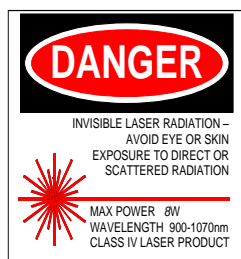
<b>BMU8-915-01-R</b>	<b>8W 915nm Multimode Laser Diode Module with 0.15NA fiber</b>
<b>BMU8-940-01-R</b>	<b>8W 940nm Multimode Laser Diode Module with 0.15NA fiber</b>
<b>BMU8-960-01-R</b>	<b>8W 960nm Multimode Laser Diode Module with 0.15NA fiber</b>
<b>BMU8-975-01-R</b>	<b>8W 975nm Multimode Laser Diode Module with 0.15NA fiber</b>
<b>BMU8-975B-01-R</b>	<b>8W 976±3 nm Multimode Laser Diode Module with 0.15NA fiber</b>
<b>BMU8-915-02-R</b>	<b>8W 915nm Multimode Laser Diode Module with 0.22NA fiber</b>
<b>BMU8-940-02-R</b>	<b>8W 940nm Multimode Laser Diode Module with 0.22NA fiber</b>
<b>BMU8-960-02-R</b>	<b>8W 960nm Multimode Laser Diode Module with 0.22NA fiber</b>
<b>BMU8-975-02-R</b>	<b>8W 975nm Multimode Laser Diode Module with 0.22NA fiber</b>
<b>BMU8-975B-02-R</b>	<b>8W 976±3nm Multimode Laser Diode Module with 0.22NA fiber</b>

## Contact Information

[www.laserenterprise.com](http://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.



THIS PRODUCT COMPLIES WITH 21CFR 1040.10



REFERENCE IEC 60825-1 Edition 2.0

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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.