


## 25W 9xxnm Uncooled Multimode Laser Diode Module

BMU25-9xx-01/02-R

### Features:

- Single emitter based laser diode module
- High output power of 25W
- 0.15NA or 0.22NA 105µm core multimode optical fiber
- Hermetically sealed 2-pin package with floating anode/cathode
- Fiber laser feedback protection
- Standard wavelengths at 915, 940, 960, 975nm
- RoHS compliant 

### Applications:

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



Oclaro's new multimode single emitter based laser diode module BMU25-9xx-01/02-R has been designed to provide an increased power output enabling fiber laser and direct system manufacturers to generate higher powers with fewer modules, allowing for more compact pump configurations, greater pump block efficiency and simplification of packaging. Its compact design reduces the footprint of fiber laser pump stages

The module includes multimode laser diodes with E2 front mirror passivation that prevents Catastrophic Optical Damage (COD) to the laser diode facet even at very high power levels. The laser diodes are connected in series to allow for fast current switching. The module includes a feedback protection filter that protects the laser diodes from harmful fiber laser wavelength feedback light.

## 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 1.0cm<sup>2</sup> K/W (0.2in<sup>2</sup> K/W). Optical fiber with 105µm core diameter and 0.15NA or 0.22NA.

Parameter	Symbol	Typical	Unit
CW Output Power	$P_{op}$	25	W
Center Wavelength BMU25-915-01/02-R BMU25-940-01/02-R BMU25-960-01/02-R BMU25-975-01/02-R	$\lambda_{c915}$ $\lambda_{c940}$ $\lambda_{c960}$ $\lambda_{c975}$	915 ± 10 940 ± 10 960 ± 10 975 ± 5	nm
Spectral Width (90% of Power)	$\Delta\lambda$	6	nm
Threshold Current	$I_{th}$	600	mA
Operating Current	$I_{op}$	11	A
Operating Voltage	$V_{op}$	5.5	V
Operating Temperature	$T_{op}$	25 ± 5	°C
Feedback Protection (1030-1200nm)	$I_{1060}$	45	dB

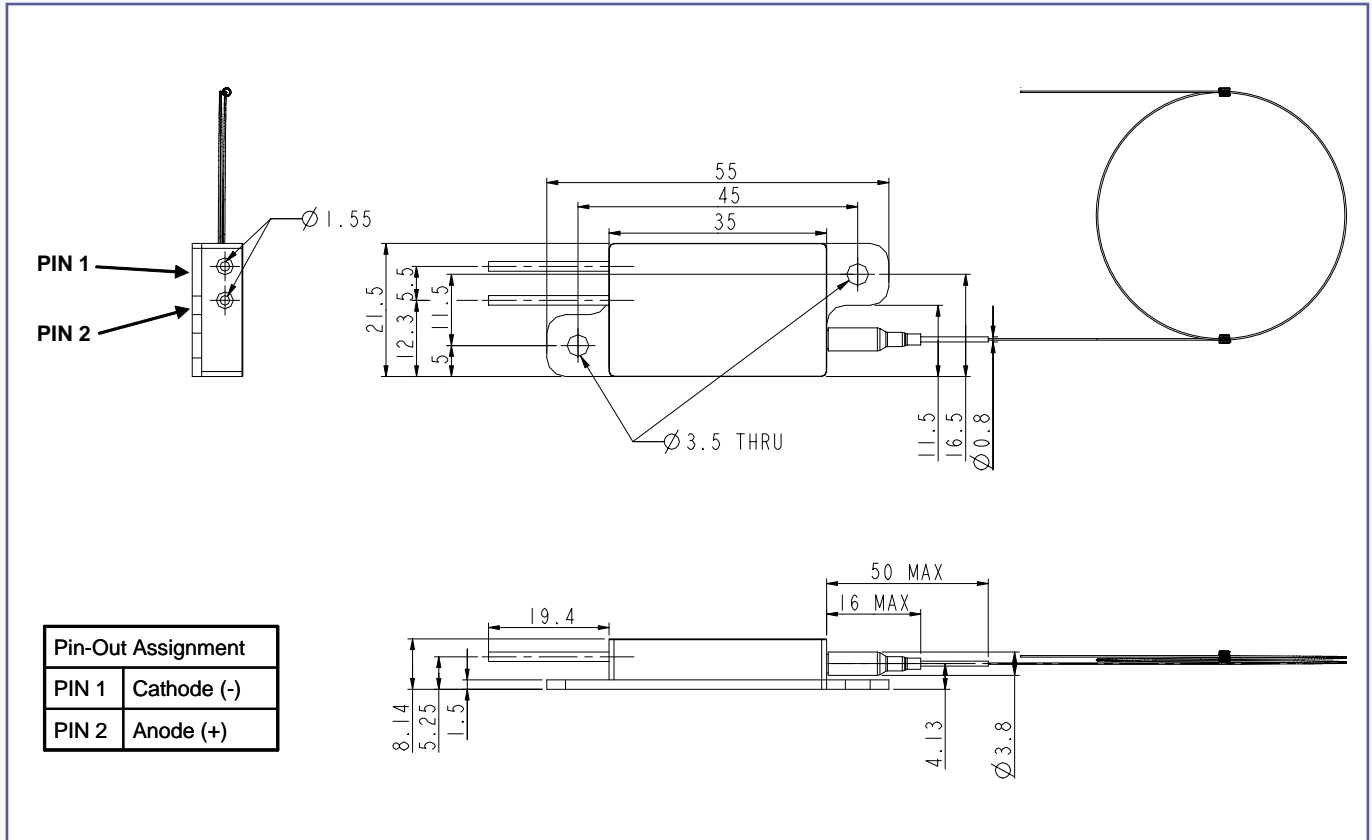
## Absolute Ratings

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	15	60	°C
Relative humidity	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	–	0.15 0.22	–	–
Fiber length	–	1.5	–	m

Package Dimensions (mm)



## RoHS Compliance

Oclaro 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

BMU25-915-01-R	25W 915nm Multimode Laser Diode Module with 0.15NA fiber
BMU25-940-01-R	25W 940nm Multimode Laser Diode Module with 0.15NA fiber
BMU25-960-01-R	25W 960nm Multimode Laser Diode Module with 0.15NA fiber
BMU25-975-01-R	25W 975nm Multimode Laser Diode Module with 0.15NA fiber
BMU25-915-02-R	25W 915nm Multimode Laser Diode Module with 0.22NA fiber
BMU25-940-02-R	25W 940nm Multimode Laser Diode Module with 0.22NA fiber
BMU25-960-02-R	25W 960nm Multimode Laser Diode Module with 0.22NA fiber
BMU25-975-02-R	25W 975nm Multimode Laser Diode Module with 0.22NA fiber

## Contact Information

[www.oclaro.com](http://www.oclaro.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 Oclaro before they become applicable to any particular order or contract. In accordance with the Oclaro policy of continuous improvement specifications may change without notice. Further details are available from any Oclaro sales representative.



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

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