

MULTI-CHANNEL MEMS VOA MODULE

DiCon's MEMS Variable Optical Attenuator Module can precisely control up to eight MEMS VOAs. This module offers a protected and easy way to control multiple VOAs through a single RS-232, RS-485 or I²C interface.



FEATURES

- Proven MEMS Durability and Reliability
- Houses & Controls Up To 8 VOAs
- Precise Repeatability

APPLICATIONS

- Test & Measurement
- OSNR Measurements
- Power Equalization



MULTI-CHANNEL MEMS VOA MODULE

OPTICAL SPECIFICATIONS^{1,9}

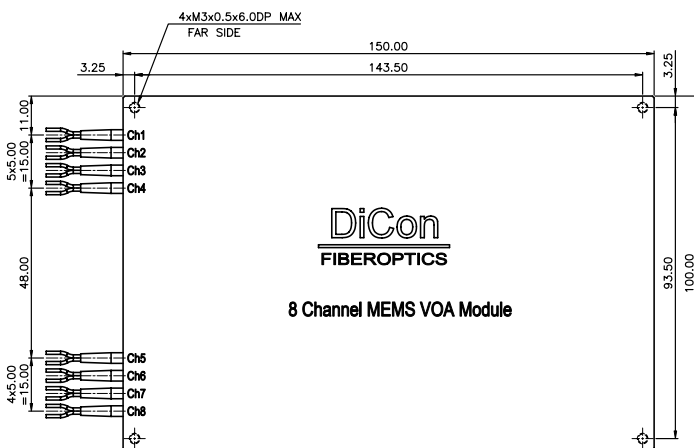
ORDERING INFORMATION

PARAMETER		RATING	
Excess Loss		0.8 dB max.	
WDL ²	Broad Band Application	0 to 5 dB	0.2 dB max. ³
		5 to 10 dB	0.3 dB max. ⁴
		10 to 20 dB	0.7 dB max. ⁴
PDL	Narrow Band Application ⁶	0 to 20 dB	0.2 dB max. ⁵
	0 to 15 dB	0.15 dB max. ⁵	
	15 to 20 dB	0.2 dB max. ⁵	
Attenuation Range		30 dB min. ⁷	
Back Reflection		-50 dB max.	
Tuning Resolution		0.01 dB max.	
Optical Power		500 mW max.	
Repeatability ⁸		0.1 dB max.	
Durability		1 x 10 ⁹ cycles min.	
Fiber Type		9/125 single mode fiber	

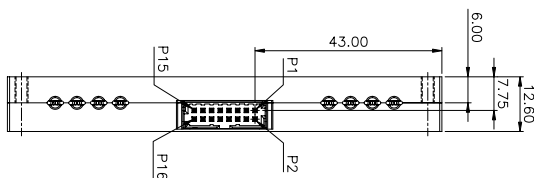
- All Specifications at room temperature, without connectors
- WDL is for single band wavelength measured from CWL
- Operation from 1290 - 1330nm or 1570-1610 nm adds 0.2dB
- Operation from 1290 - 1330nm or 1570-1610 nm adds 0.3dB
- Operation from 1290 - 1330nm or 1570-1610 nm adds 0.1dB
- Maximum change of each 2 nm segment within the operating range
- Available up to 40 dB. Contact DiCon for details.
- Repeatability is defined within 100 cycles
- DiCon recommends use of external detectors or a dynamic power equalizer module for applications requiring absolute attenuation accuracy.

MECHANICAL DIMENSIONS (Units: mm)

Top View



Left Side View



MA - □ - □ - □ - □ - □ - □ - □ - □ - □

Product Code

MA Attenuator Module

Number of Components

N Number of Components (Specify 1 ≤ N ≤ 8)

Attenuator Type

T Transparent¹
O Opaque²

1. Minimum attenuation with no power

2. Maximum attenuation with no power

Control Type

I2C I²C
RS2 RS-232
RS4 RS-485

Ripple Type

S Slow Ripple (Broad Band WDL)
F Fast Ripple (Narrow Band WDL)

Wavelength Range³

13 1290 - 1330 nm
15 1528 - 1563 nm
16 1570 - 1610 nm
13/15⁴ 1290 - 1330 nm & 1528 - 1563 nm
15/16⁴ 1528 - 1563 nm & 1570 - 1610 nm

3. Custom wavelength ranges available

4. Each wavelength band will have its own attenuation curve and only one curve can be used at a time.

Fiber and Jacket Type

9/BF Corning SMF-28 9µm bare fiber
9/LT Corning SMF-28 9µm fiber with loose tube
Or other equivalent 9µm Singlemode fiber

Connector Type

FC/SPC FC/SPC
FC/APC FC/APC
LC/SPC LC/SPC
LC/APC LC/APC
SC/SPC SC/SPC
SC/APC SC/APC

Other connector types are also available

Pigtail Length

1 1 meter
X Specify X meters

ELECTRICAL SPECIFICATIONS

PARAMETER	RATING
Latching Type	Non-latching
Control Type	I ² C, RS232 or RS485
Vcc Voltage	5 VDC
Power Consumption	1 W max.
Connector Type	Molex 87833-1620