

850nm FC/APC Multimode Attenuator

MM50/125



● Product Description

Multimode variable attenuator is based on Idealphotonics' unique optical design and processing capabilities. Our VOA has the characteristics of fast adjustment of optical attenuation, small size, low insertion loss, low polarization-related loss, high mode-related stability and high reliability. It is mainly used in multimode transmission networks, power balancing, product testing, related instruments and equipment, etc.



● Product features

Wide operating wavelength range & wide temperature range、 Low insertion loss、 Low polarization-dependent loss and polarization mode dispersion、 High reliability and stability、 Telcordia GR-122 1 & GR-1209

● Part Number

MP-VOA-MEMS-850-1-9-M5A

● Application area

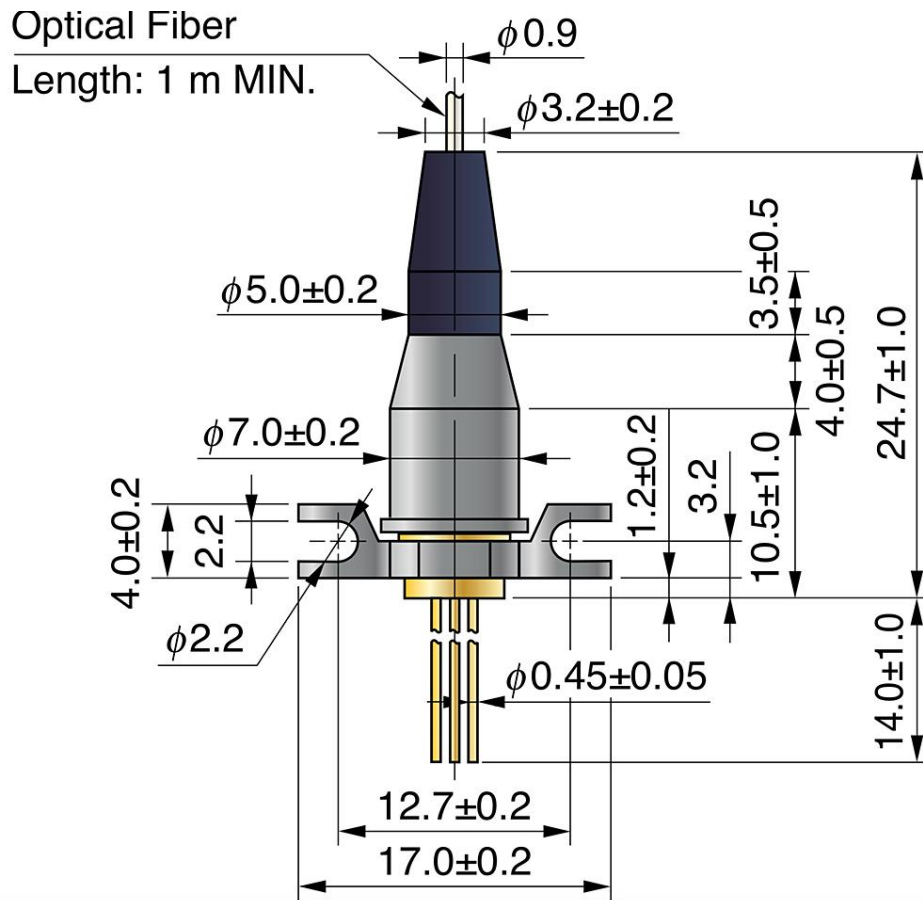
Multimode product testing、 Multimode transmission network、 Power balancing、 Receiver protection、 Related instruments and equipment

● Core parameters

Wavelength	Fiber	Connector
850nm	MM50/125	FC/APC



● **Dimension Drawing**



● **General Parameters**

Parameters

Item	Optical performance		Specification	Note
1	Attenuator Type	Bright or Dark	Bright	Bright: Minimum insertion loss @ 0V Dark: Maximum attenuation @ 0V
2	Operating wavelength	nm	850 ± 10	
3	Attenuation range	Min dB	30	Working voltage:



					$\leq \pm 10V$, square wave
4	Insertion loss	Max	dB	1.0	
5	Repeatability @20dB	Max	dB	0.1	
6	Mode dependent loss @20dB20Minute	Max	dB	0.2	
7	Return loss	Min	dB	30	
8	Response time	Max	ms	5	
9	Maximum optical power	Max	mw	500	
	Electrical performance				Specification
1	Drive voltage (AC)	Max	V		15
2	Power consumption	Max	mw		10
	Mechanical properties				Specification
1	Fiber type				50/ 125um 、 62.5/ 125um
2	Fiber Length	Min	m		1.0

*. All indicators are without connectors and are only valid at the above wavelengths, polarization states and temperatures.

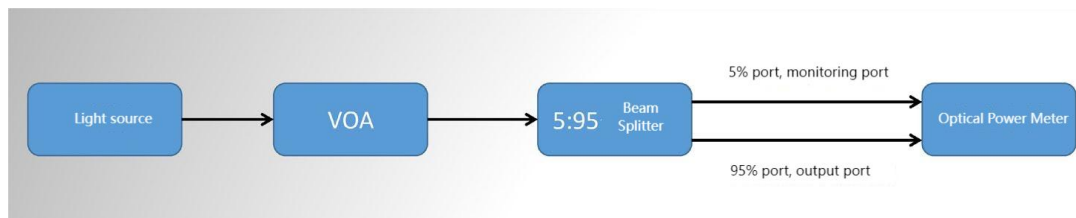
**. Indicators are subject to change without prior notice.

Recommended applications

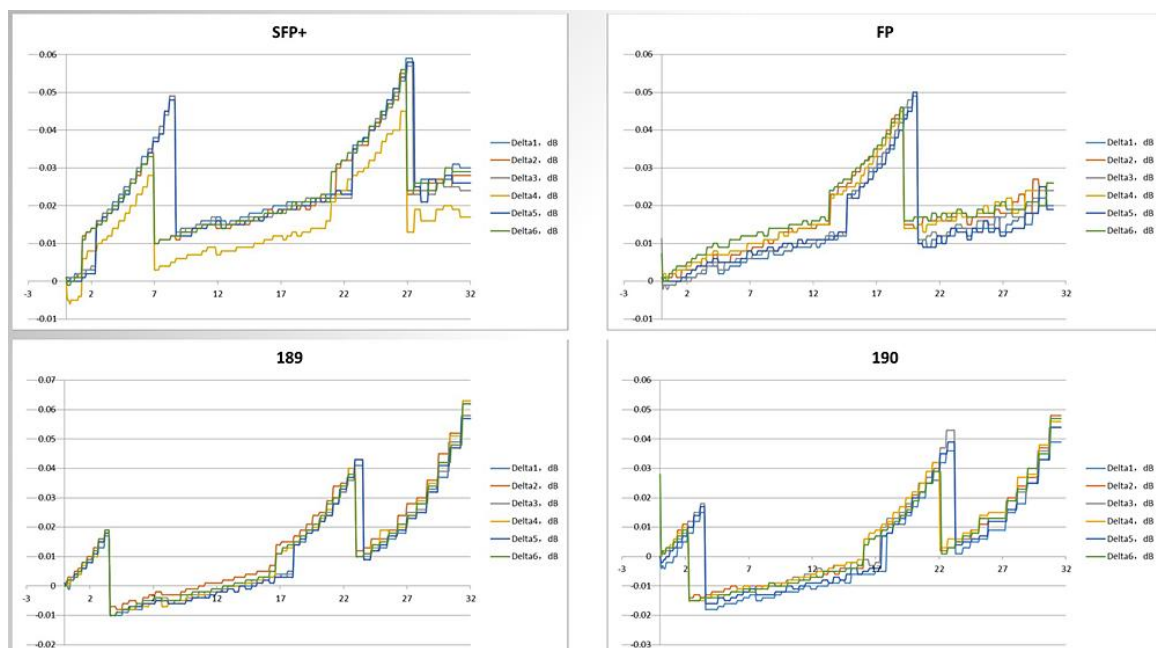
A 5:95 beam splitter is connected to the back end of the multimode VOA, where the 5% port output is connected to the multimode PD as the monitoring end, and the 95% port outputs directly as the output end.

The data is reversed through the monitoring end to control the output voltage so that the output end reaches the set attenuation value.

Test block diagram



Test Data - - Attenuation Accuracy



1. The horizontal axis is the attenuation value.



2. The vertical axis is the difference between the attenuation value calculated by the monitoring end and the actual attenuation value of the output end.

Recommended power supply conditions

1. Continuous square wave drive, frequency: 5KHZ, waveform: square wave
2. Peak-to-peak value: 0-35V, duty cycle: 50%

Order Info

MP-VOA-MEMS-W□□□□- ☆- △ -XX

W□□□□: Wavelength

850: 850nm

1310: 1310nm

1550: 1550nm

1570: 1570nm

1650: 1650nm

☆ : Pigtail Length

05: 0.5m

1: 1m

10: 10m

△: Loose Tube

B: Bare Fiber

9 : 900um Loose Tube



20: 2mm Loose Tube

30: 2mm Loose Tube

XX: Fiber and Connector Type

S5A=MM50/ 125+ FC/APC

S5P= MM50/ 125+ FC/PC

S6A=MM62 . 5/ 125+ FC/APC

S6P= MM62 . 5/ 125+ FC/PC