



## Polarization Maintaining MEMS Variable Optical Attenuator

Rev 11C

### Description

AFR's MEMS Variable Optical Attenuator is based on an electrostatic driven micro-electro-mechanical-system (MEMS) chip. The MEMS Variable Optical Attenuator chip consists of a tilting mirror to change light coupling between input and output fibers. The components are characterized with low insertion loss, fast response and compact size. The MEMS Variable Optical Attenuator is widely used in WDM networks, power control or gain variation in EDFA.

### Key Features

- Fast Response
- Low Insertion Loss
- Compact Size

### Applications

- Fiber Optics Communication
- WDM Networks
- EDFA

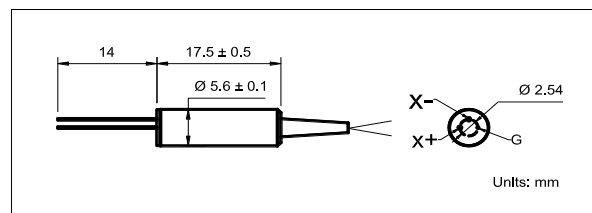
### Specifications

Parameter	Unit	Value
Operating Wavelength Range	nm	1530 - 1570/1570 - 1610
Max. Insertion Loss	dB	0.8
Min. Attenuation Range	dB	30
Min. Block State (Dark Type, IL at Power off)	dB	40
Max. Polarization Dependent Loss @ 0 dB	dB	0.1
Max. Polarization Dependent Loss @ 20 dB	dB	0.3
Min. Extinction Ratio	dB	18
Max. Wavelength Dependent Loss @ 10 dB	dB	0.5
Max. Wavelength Dependent Loss @ 20 dB	dB	1
Min. Return Loss	dB	50
Max. Response Time	ms	2
Max. Optical Power (Continuous Wave)	mW	300
Max. Drive Voltage	V	8
Fiber Type	-	PM 1550 Panda Fiber
Operating Temperature	°C	- 5 to + 70
Storage Temperature	°C	- 40 to + 85

<sup>1</sup>IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added.

<sup>2</sup>Connector key is aligned to slow axis.

### Package Dimensions



## Ordering Information

**PMMEMSVOA-①-②-③-④-⑤**

①: Wavelength

②: VOA Type

③: Connector Type

④: Fiber Jacket

⑤: Fiber Length

C - C Band

D - Dark

1 - FC/UPC

B - 250  $\mu$ m Bare Fiber

Q - 0.75 m

L - L Band

B - Bright

2 - FC/APC

L - 900  $\mu$ m Loose Tube

S - Specify

3 - SC/UPC

4 - SC/APC

N - None

S - Specify