MEMS Variable Optical Attenuator (VOA serious)

Rev 11C

Description

AFR's MEMS Variable Optical Attenuator is based on an electrostatic drived 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 uesd in WDM networks, power control or gain variation in EDFA.

Key Features

- Fast Response
- Low Insertion Loss
- Compact Size

Applications

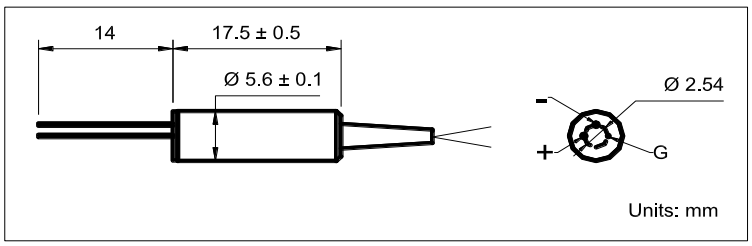
- WDM Networks
- Power Control
- EDFA

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
Max. Wavelength Dependent Loss @ 10 dB	dB	0.5
Max. Wavelength Dependent Loss @ 20 dB	dB	1
Max. Ripple (within 0.4 nm window within 20 dB)	dB	0.05
Max. Polarization Mode Dispresion (PMD)	ps	0.1
Min. Return Loss	dB	50
Max. Response Time	ms	2
Max. Optical Power (Continuous Wave)	mW	300
Max. Drive Voltage	V	8
Fiber Type	-	SMF-28
Operating Temperature	℃	- 5 to + 70
Storage Temperature	℃	- 40 to + 85

[1]IL is 0.3 dB higher, RL is 5 dB lower for each connector added.

Package Dimensions



Ordering Information

MEMSVOA-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 μm Bare Fiber	1 - 1.0 m
L - L Band	B - Bright	2 - FC/APC	L - 900 μm Loose Tube	S - Specify
		3 - SC/UPC	S - Specify	
		4 - SC/APC		
		N - None		
		S - Specify		