

Single Channel MEMS Variable Optical Attenuator



Description

The MEMS Variable Optical Attenuator is based on the Micro-Electro-Mechanical System technology. These MEMS VOA can be used to achieve the remote control of the power in the networks by a MEMS chip with a movable mirror on the silicon. The mirror attenuates the laser light power by coupling the input beam onto the output fiber. The applied voltage to the device controls the mirror tilt angle, thus the desired attenuation amount.

Features

- Wide Wavelength Operating Range
- Compact Size
- High Stability
- High Reliability

Applications

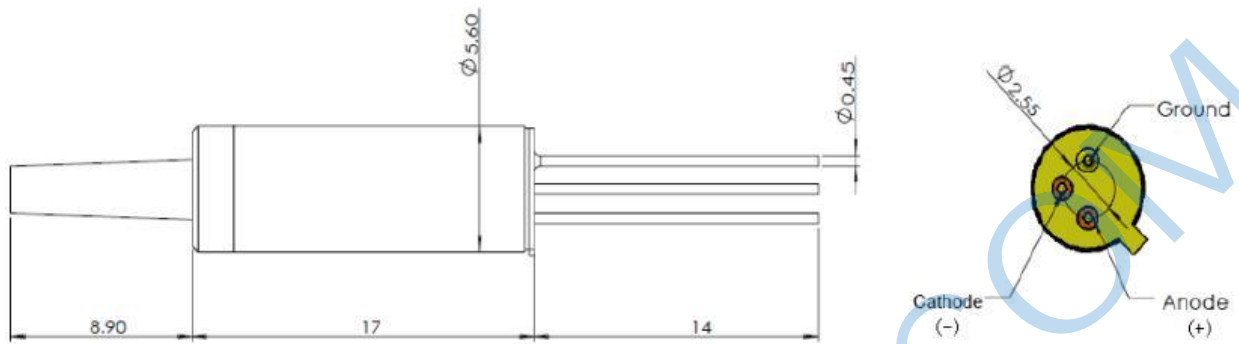
- Fiber Laser
- Fiber Optic Amplifier
- Fiber Optic Sensing
- Fiber Optic Communication

Specifications

Parameter	Unit	Value			
		O Band (1290-1330nm)	C Band (1530-1570nm)	L Band (1570-1610nm)	Full Band (1270-1620nm)
Operating Wavelength Range	nm				
Attenuation Type	-	Bright or Dark			
Attenuation Range	dB	≥15/20/30/40			
Attenuation Resolution	-	Continuous			
Insertion Loss (Max.)	dB	0.7			
Return Loss (Min.)	dB	45			
Response Time (10-90%optical power)	ms	≤2			
Driving Voltage	V	0-6.5 or 0-15			
Driving Power	mW	≤2			
Polarization Dependent Loss	dB	≤0.1@0dB Attn., ≤0.5@20dB Attn.			
Wavelength Dependent Loss	dB	≤0.3@0dB Attn. over 20nm span, ≤1.5@<20dB Attn. over 20nm span			
Max Optical Power (CW)	mW	500			
Fiber Type	-	SMF-28e			
Package Dimensions	mm	Φ5.6 x L17			
Operating Temperature	°C	0 to +70			
Storage Temperature	°C	-40 to +85			

Notes: Tested at 25 °C. Specifications exclude connectors.

Product Dimensions



Ordering Information

<input type="checkbox"/> nm	<input type="checkbox"/>	<input type="checkbox"/> dB	<input type="checkbox"/> V	<input type="checkbox"/>	<input type="checkbox"/> m	<input type="checkbox"/> μm	<input type="checkbox"/>	<input type="checkbox"/>
Operating Wavelength Range	Attenuation Type	Attenuation Range	Driving Voltage	Fiber Type	Pigtail Length	Pigtail Diameter	Input Connector	Output Connector
O Band (1290-1330nm)	Bright	≥15dB	0-6.5V (Default)	SMF-28e	0.5m	250μm Bare Fiber	None	None
C Band (1530-1570nm)	Dark	≥20dB	0-15V		1.0m	900μm Loose Tube	LC/UPC	LC/UPC
L Band (1570-1610nm)		≥30dB			1.5m		LC/APC	LC/APC
Full Band (1270-1620nm)		≥40dB			2.0m		SC/UPC	SC/UPC
							SC/APC	SC/APC
							FC/UPC	FC/UPC
							FC/APC	FC/APC
							ST/UPC	ST/UPC
							ST/APC	ST/APC