

# MEMS VOA Specification

MSVOA-B-C-20-025-1-00-5

Mirror MEMS optical attenuators are based on a micro-electro-mechanical system (MEMS) technology. The MEMS Optical Attenuators has fast response, small volume and high reliability, the wavelength range can cover the whole C + L band.

## Application

- Channel equalization
- Gain and Slope Control in EDFA
- For ROADM power balance
- Receiver Protection/switch during transmitter turn-ons

## Features

- Low insertion loss
- Low polarization dependent
- Compact size
- Excellent reliability
- GR-1221 compliance

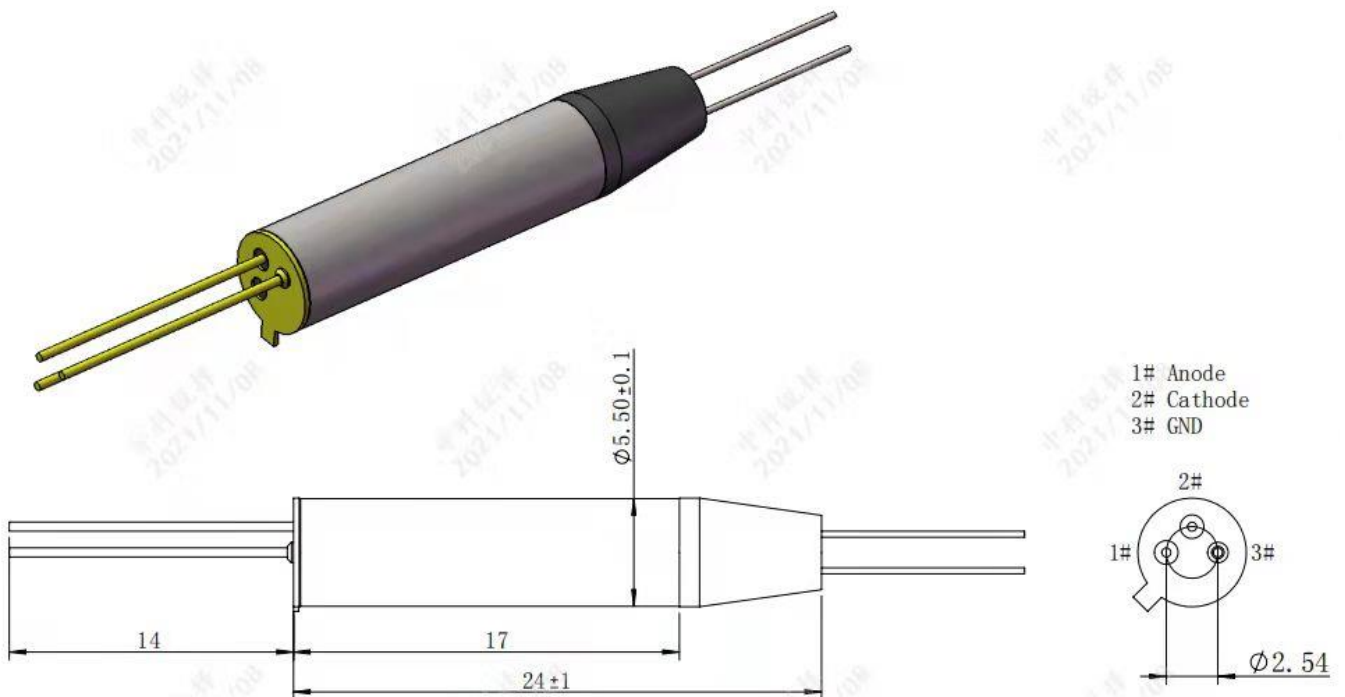
## OPTIC AND ELECTRIC SPECIFICATION

Parameters	Unit	Specification
Operation Wavelength	nm	1528~1565
Test Wavelength	nm	1550
Attenuation Type		Bright or Dark
Attenuation Range	dB	>40
Insertion Loss	dB	≤0.7
WDL	≤15dB	≤0.5
	15-20dB	≤0.8
TDL	≤15dB	≤1.0
	15-20dB	≤1.5
PDL	@15dB	≤0.2
Return Loss	dB	≥45
Repeatability	dB	≤0.1
Response Time	ms	< 5
Driving Voltage	V	≤5
Max Optical Power	mW	≤500
Operating Temperature	°C	-5~70
Storage Temperature	°C	-40~85
Dimension	mm	φ5.5×24

## OPERATING AND STORAGE CONDITIONS

NO	PARAMETER	SPECIFICATION	UNITS	NOTE
3.1	Operation Temperature	-5~70	°C	
3.2	Storage Temperature	-40~85	°C	
3.3	Operation Humidity	5~85	%RH	
3.4	Storage Humidity	5~85	%RH	

## MECHANICAL DRAWINGS



## FIBER AND CONNECTOR

PARAMETER	SPECIFICATION	UNITS	NOTE
Fiber Type	250um SMF-28e Fiber ,		
Fiber Length(customer specify)	1.00±0.05 (Customer specify)	m	
Ports Color	(Input): Red (Output): Clear		
Optical Connector	None (customer specify)		

## ORDERING INFORMATION

MSVOA - ①-②-③-④-⑤-⑥-⑦						
① 产品类型 Product Type	② 波长范围 Wavelength Range	③ 衰减范围 Attenuation Range	④ 光纤规格 Fiber Dia	⑤ 光纤长度 Fiber length	⑥ 连接器 Connector	⑦ 电压 Voltage
<b>B:</b> Bright <b>D:</b> Dark	<b>O:</b> 1290-1330nm <b>C:</b> 1528-1565nm <b>L:</b> 1570-1625nm Or customer Specify	<b>20:</b> 20dB <b>30:</b> 30dB <b>40:</b> 40dB Or customer Specify	<b>025:</b> 0.25mm <b>09:</b> 0.9mm	<b>1:</b> 1m Or customer Specify	<b>00:</b> no connectors Or customer Specify	<b>5:</b> 5V Or customer Specify

**Note:** The MEMS VOA are ESD-Sensitive devices. Please insure that proper ESD handling procedures are followed.