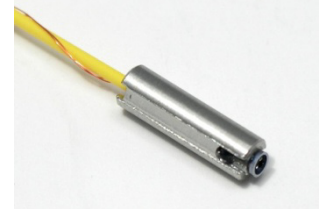


MEMS Variable Optical Attenuator Pigtail (patents pending)

Product Description

The MEMS VOA Pigtail is based on a micro-electro-mechanical mechanism featuring simple construction, high reliability, and excellent optical performance. It is available in either normally-open or normally-closed configurations. The VOA Pigtail is driven by an electrical voltage; and the attenuation can be continuously adjusted.

It is designed to be part of laser, WDM package, or TOSA and ROSA.



Performance Specifications

MM VOA Pigtail	Min	Typical	Max	Unit
Wavelength		C-Band		nm
Insertion Loss ¹		0.3	0.5	dB
Attenuation Range	20			dB
Polarization Dependent Loss @10dB		0.15	0.3	dB
Wavelength Dependent Loss @10dB		0.2	0.5	dB
Temperature Dependent Loss @10dB		0.3	0.5	dB
Attenuation Resolution		Continuous		
Polarization Mode Dispersion		0.01	0.05	ps
Return Loss	45			dB
Repeatability			0.1	dB
Response Time		2	5	ms
Driving voltage ²		5	6	V
Power consumption ²		50	80	mW
Optical Power Handling		300	500	mW
Operating Temperature	-5		75	°C
Storage Temperature	-40		85	°C
Reliability		Telcordia 1209 and 1221		
Fiber Type		Corning SMF28 or equivalent		
Package Dimension		See drawing below		mm

Notes:

1. Excluding connectors
2. For full dynamic range. Other drive voltages available

Features

- Compact
- Low Cost
- High Reliability
- Low IL, PDL, WDL & TDL
- Low Power Consumption

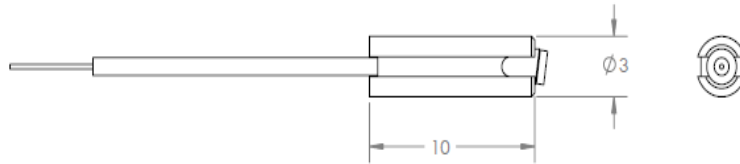
Applications

- Laser Power Control
- Power Regulate
- Channel Balance
- Instrumentation



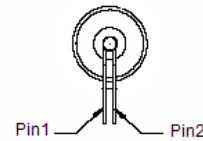
MEMS Variable Optical Attenuator Pigtail

Mechanical Footprint Dimensions (mm)



Electrical Driving Instruction

Pin 1	V+
Pin 2	V-



NOTES

- Pin1 and Pin2 are for control voltage that are reversible.
- Do not apply more than 7V.

Ordering Information

PTOA-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Off State	Package	Fiber	Fiber Length	Connector	
	Standard	1310=3 1550 = 5 C+L=2 1260-1620= 8 Special = 0	Transparent=1 Opaque = 2	Standard=1 Special=0	SMF-28 =1 Special = 0	Bare fiber=1 900um loose tube=3 Special = 0	0.25m= 1 0.5m = 2 1.0m= 3 Special =0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0

