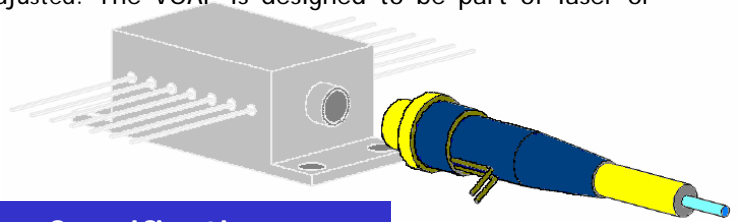


# MEMS Variable Optical Attenuation Pigtail (VOAP) with Build-in Isolator

## Product Description

The MEMS VOAP is based on a micro-electro-mechanical mechanism featuring simple construction, high reliability, and excellent optical performance. The VOAP is compliant with the Telcordia 1209 and 1221 reliability standards, being available in either normally-open or normally-closed configurations and with an build-in isolator option. The VOAP is driven with an electrical current; and the attenuation can be continuously adjusted. The VOAP is designed to be part of laser or WDM package.



## Performance Specifications

MEMS VOAP	Min	Typical	Max	Unit
Wavelength	1310±50 and/or 1480±50 and/or 1550±50			nm
Insertion Loss <sup>1</sup>	0.4	0.6	0.8	dB
Polarization Dependent Loss <sup>2</sup>		0.15	0.25	dB
Wavelength Dependent Loss <sup>2, 4</sup>		0.3	0.6	dB
Temperature Dependent Loss <sup>3</sup>		0.05	0.2	dB
Attenuation Range <sup>5</sup>		20	60	dB
Attenuation Resolution	Continuous			
Polarization Mode Dispersion <sup>2</sup>		0.15	0.25	ps
Return Loss	50			dB
Response Time <sup>6</sup>			5	ms
Operating Temperature	-5		75	°C
Isolation <sup>7</sup>	20	28	40	dB
Power Consumption <sup>2</sup>		30		mW
Optical Power Handling		300		mW
Storage Temperature	-40		85	°C
Reliability	Telcordia 1209 and 1221			
Fiber Type <sup>8</sup>	Corning SMF-28			
Package Dimension	22.6xØ7.0			mm

Notes:

1. Without connector and at room temperature, single stage isolator
2. At attenuation of 20dB or less, with single stage isolator
3. At 0 attenuation and at whole temperature range
4. Within 30nm bandwidth
5. On/off switch function available
6. Faster version (<1ms) is available
7. Dual stage isolator available on request
8. PM type available, ER>20dB

## Features

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

## Applications

- Laser Power Control
- VMUX
- Power Balance
- Instrumentation