

## FVOA2000

*Variable Optical Attenuator for Amplifier and High Speed Applications*

### Features

- Ultra fast speed
- Low loss, low WDL and low PDL
- Hermetically sealed MEMS chip
- Insensitive to shock and vibration
- ESD safe up to 2000V
- Low power consumption
- No epoxy in optical path



### Applications

- Gain control for amplifiers
- Sub carrier modulation
- Fast switching

### General

Designed with low wavelength dependence and low polarization dependence, the FVOA2000 is ideally suited for gain control in long haul and metro amplifier applications. This MEMS based VOA provides continuous attenuation in a transistor-like, hermetically sealed package without susceptibility to shock and vibration.

## Performance Specifications

PARAMETER	SPECIFICATION
Wavelength Range	C-Band / L-Band
Attenuation Range	25 dB
Attenuation w/o power	Bright
Attenuation Resolution	Continuous
Insertion Loss <sup>1</sup>	1.0 dB (0.7 dB typical)
Wavelength dependence of attenuation <sup>2</sup>	0.30 dB (0.14 dB typical)
Polarization dependent loss <sup>2</sup>	0.15 dB (0.08 dB typical)
Return Loss	45 dB
Response speed	90 $\mu$ s (50 $\mu$ s typical)
Drive voltage <sup>3</sup>	8 Volts
Drive power	0.5 mW
Fiber type	SMF-28 or equivalent
Maximum optical power	500 mW
Operating temperature	-5° to 70° C
Package size	9.2 mm x 12.1 mm
Wear out	>100 billion cycles minimum
Reliability	Telcordia GR-1209, GR-1221
1. Valid over temperature and wavelength range, excluding connectors 2. For attenuations up to 10dB over temperature and wavelength range 3. Maximum AC voltage for full attenuation range	