

# 0706 Tunable Optical Filter

TF1004



## Fiber Fabry-Perot Tunable Filter, 1.4 nm Bandwidth, FSR 50 nm

The high performance tunable filter has many applications, as the key component for wavelength filtering of Fiber Bragg Grating (FBG) based sensor systems. It also allows many telecom DWDM systems to optimize EDFA receiver performance. It has proven its capabilities in early WDM applications and has paralleled the ever increasing performance demands of the telecom market. Without the added complexity of collimating optics and lenses, the filter achieves high finesse and maintains low loss making it a critical component to a broad range of applications.

### FEATURES

- 1 dB max. Low Insertion Loss
- All-Fiber Design
- Excellent Thermal, Vibration & Long Term Stability
- 100 FITs max. Field-Proven
- Available in S, C & L Wavelength Bands
- 2000 min. High Finesse

### USE IN

- EDFA Noise Filter
- WDM Channel Selector
- Optical Spectrum Analysis
- Tunable Laser
- Wideband Channel Switching
- WDMA Network
- Laser Stabilization

S-band	1450 nm to 1520 nm
C-band	1520 nm to 1570 nm
L-band	1570 nm to 1630 nm
Free Spectral Range	50 nm typ.
Bandwidth	1.4 nm max.
Finesse	40 to 50
Insertion Loss	1.2 dB typ. max.
Polarization Dependent Loss	0.5 dB max.
Power Handling	100 mW max.
Tuning Voltage/FSR	12 V max.
Capacitance	3.0 $\mu$ F max.
Slew Rate	10 V/ms max.
Tuning Voltage	70 V max.
Operating Temperatures	-20°C to +80°C
Change Voltage	12 V max.
Change Insertion Loss	0.5 dB max.
Dimension	1/2x9/16x2 1/4 inches
Weight	1 oz

**Order notes to our customers:** The default parameters are as follows. For special needs, please contact sales.

**1) Connector FC/APC, 900  $\mu$ m, 1 m by default for all devices except for high power devices.**

**2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.**