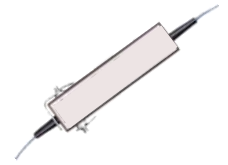


## 0506 Tunable Optical Filter

TF1002



### Fiber Fabry-Perot Tunable Filter, 0.2 nm Bandwidth, FSR 70 nm

The FFP-TF is the high performance tunable filter that 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 FFP-TF 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

## 0506 Tunable Optical Filter

|   |  |
|---|--|
| S-Band                                      | 1450 nm to 1520 nm                       |
| C-band                                      | 1520 nm to 1570 nm                       |
| L-band                                      | 1570 nm to 1620 nm                       |
| Free Spectral Range                         | 70 nm typ.                               |
| Bandwidth                                   | 0.2 nm max.                              |
| Finesse                                     | 500 min.                                 |
| Insertion Loss                              | 2.5 dB max.                              |
| Polarization Dependent Loss                 | 0.5 dB max.                              |
| Input Power                                 | 200 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/Operating Temperature        | 12 V max.                                |
| Change Insertion Loss/Operating Temperature | 0.5 dB max.                              |
| Change Insertion Loss/Vibration             | 0.5 dB max.                              |
| Dimension                                   | 1/2x9/16x2 1/4 inches; 12.7x14.3x57.2 mm |
| Weight                                      | 1 oz; 28g                                |
| Pigtail Jacket - loose                      | 900 $\mu$ m Buffer Tubing                |
| Pigtail Length                              | 1 m min.                                 |