Manual Fiber Optic Tunable Filter

(Simple the best tunable filter in the industry)

OEFTF-100 is a thin-film-based manually tunable bandpass filter, which is used to manually adjust the center wavelength of a 100GHz flat-top narrow band over C- or L-band. Wavelength selection is made through a precise micrometer driver. Low insertion loss, low polarization-dependent loss, high off-band suppression and low cost enable this filter as an ideal choice for laboratory applications and other purposes.

Key features

- 100GHz flat-top shape transmission
- High tuning resolution (0.04nm)
- Wide tuning range (C- or L-band)
- Low insertion loss and polarization-dependent loss (PDL)
- High off-band suppression (-50dB)

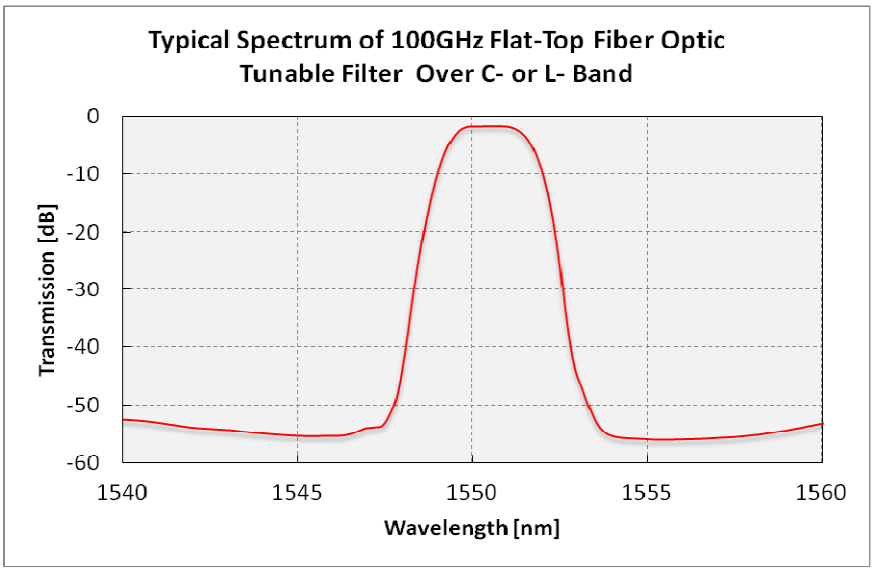

Figure 1. 100GHz Manual Tunable Thin Film Filter Spectrum

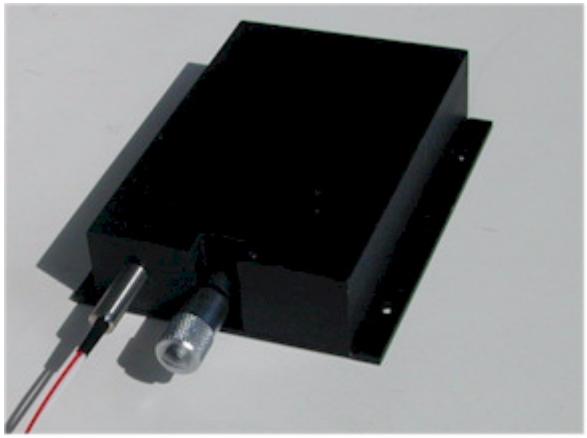

Figure 2. Manual Tunable Thin Film Filter

Main Specifications of Flat-top 0.8nm Bandwidth **OEFTF-100**:

Specifications	Unit	
Wavelength Tuning Range	nm	C-band 1530 – 1565 or L-band 1575-1610
Pass Band Shape	nm	Flat-top transmission (100GHz bandwidth, 0.8)
Insertion Loss	dB	$\leq$ 2.0
Wavelength Resolution	nm	0.04
Polarization Dependent Loss	dB	$\leq$ 0.25
Return Loss	dB	$\geq$ 50
Off Band Rejection	dB	$\geq$ 50
Power Handling	mW	$\leq$ 500
Operation Temperature	^{o}C	10 ~ + 50
Storage Temperature	^{o}C	-10 ~ 75
Dimension	mm	18.5 x 50 x 60
Maximum tension load of pigtail	N	5
Fiber Type of pigtail *		1 M long, SMF-28 with 900 micron loose jacketed

* Pm fiber pigtails are also available on request.

Applications:

- Wavelength selection in DWDM system test
- Optical performance monitor
- Tunable optical noise filter
- Instrumentation
- Optical Signal Filter
- Biomedical
- Fiber optic sensing