



Manual Etalon-Based Fiber Optic Tunable Filter Long Range

Product Description

>120nm

Based on a proprietary thin film cavity filter technology, we produce Fiber Optic Tunable Filters with central wavelengths of 1060nm to 2050nm having a long tuning range over 120nm. Other center wavelength can also be made. This is achieved by combining two tunable filters and two wavelength independent optical switches. The wavelength tuning is made by manually rotating two precise micrometers; one at a time and selected by a push button toggle switch. Our unique low insertion loss design presents a cost-effective solution for long range fiber tunable filter.



Performance Specifications

Parameter		Min	Typical	Max	Unit
Wavelength Coverage	1450-1580	, 1510-1640,	1950-2080	nm	
Tuning Resolution	-	0.1	-	nm	
Insertion Loss [2]		2	2.6	4	dB
Bandwidth @-3dB	-	1	1.2	nm	
Bandwidth @-20dB	-	10	-	nm	
Off-Band Suppression	-	30	-	dB	
PDL (SM fiber only)	-	0.15	0.35	dB	
PMD (SM fiber only)	-	-	0.5	ps	
Extinction Ratio (PM fiber of	18	23	-	dB	
Return Loss	40	-	-	dB	
Optical Power Handling (CW)	Standard version	-	0.5		W
	High power version		3		W
Operating Temperature		0	20	60	° C
Storage Temperature	-10	-	70	° C	

- [1]. Longer the wavelength, larger the tuning range
- [2]. Smaller the fiber core, higher the loss. The measurement is an integration of the transmission peak using a broadband source. Excluding connector loss

Features

- Compact and Low Cost
- Wide Tune Range
- Wide Wavelength
- Low IL and PDL

Applications

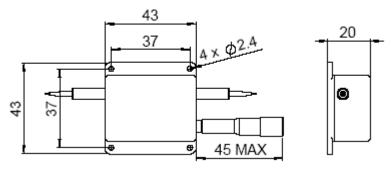
- DWDM networks
- Fiber Sensing
- ASE control
- Tunable Fiber Laser

Revised on 7/15/21 (Click here for latest revision)

* PHOTONWARES

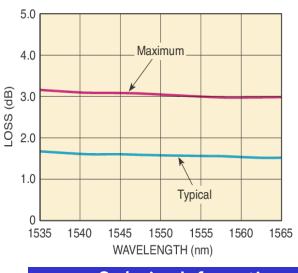
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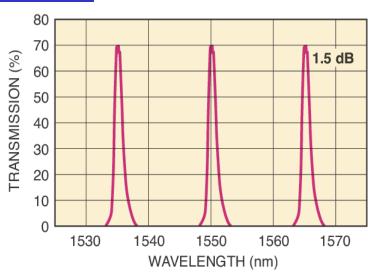
Mechanical Dimension (mm)



*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Typical Transmission Curve





Ordering Information

FOTF-	0 3			3				
	Туре	Center Wavelength	Config.	Package	Fiber Type		Fiber Length	Connector
		2050nm=1 2000nm = 2 1950nm= 4 1310nm = 3 1550nm = 5 1600nm = 7 1060nm = 6 Special = 0	Standard = 1 High power = 2		SMF-28 = 1 HI1060 = 2 PM980 = 3 PM1550 = 4 Special = 0	Bare fiber =1 900um tube=3 Special=0	0.25m= 1 0.5m = 2 1.0 m= 3 Special =0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0