

# Mini Manual Etalon-Based Fiber Optic Tunable Filter

(low loss, polarization insensitive, 1nm bandwidth)

## Product Description

Agiltron offers Miniature Fiber Optic Tunable Filters featuring polarization insensitive, low loss, and low cost with central wavelengths of 780 to 2000nm. This version offers a low optical loss platform that locks onto a desired wavelength with a small tuning. For communication bands, it uses standard WDM filters. For other wavelength band, special filter is required (produced under NRE). This version is cost effective for volume system applications. It is tunable continuously. The wavelength tuning is made by manually rotating a screw. A position locking screw is incorporated. The center wavelength and the bandwidth can be customized in accordance with the requirements. High average power handing up to 10W is available. Agiltron's unique high reliability and low insertion loss design presents a most cost-effective solution for OEM applications from fiber lasers, optic networks, fiber sensing system.



## Performance Specifications

Parameter	Min	Typical	Max	Unit
Center Wavelength	780, 850, 1060, 1310, 1550, 2000			nm
Tuning Range	10	20	80	nm
Tuning Resolution	-	0.1	-	nm
Insertion Loss <sup>[1]</sup>	0.8 <sup>[2]</sup>	1 <sup>[2]</sup>	3	dB
Bandwidth @-3dB	-	1	1.2	nm
Bandwidth @-20dB	-	10	-	nm
Off-Band Suppression	-	30	-	dB
PDL (SM fiber only)	0.15	0.2	0.5	dB
PMD (SM fiber only)	-	-	0.5	ps
Extinction Ratio (PM fiber only)	18	23	-	dB
Return Loss	40	-	-	dB
Optical Power Handling (CW)	Standard version		-	W
	High power version		10	W
Operating Temperature	0	20	60	° C
Storage Temperature	-10	-	70	° C

[1]. Excluding connector loss.

[2]. Low loss is only achievable within a small tuning range using specially made filter

## Features

- Compact
- Low Cost
- Low Loss
- Low PDL

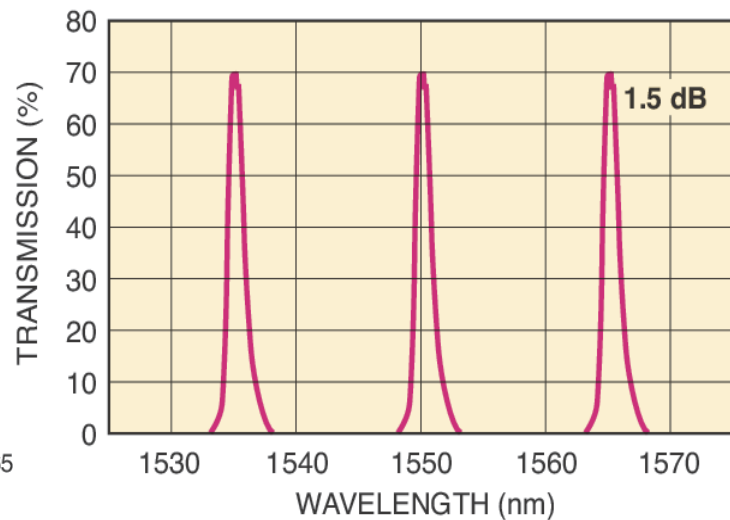
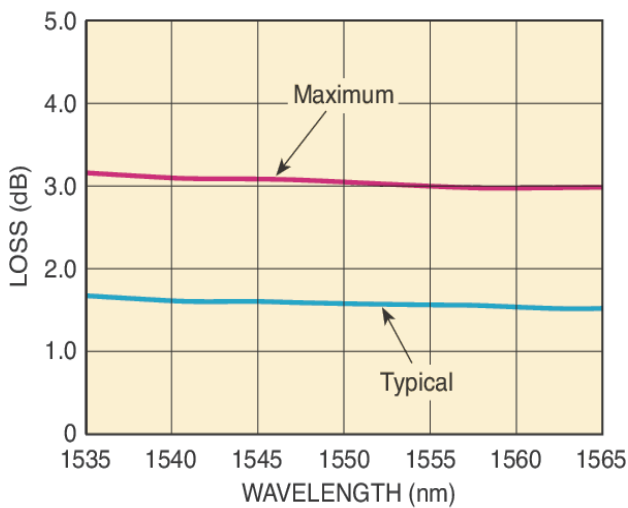
## Applications

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

## Mechanical Dimension (mm)

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

## Typical Transmission Curve



## Ordering Information

FOTF-	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Tuning Rang	Power Handling	Package	Fiber Type		Fiber Length	Connector
		2000nm = 2 1310nm = 3 1550nm = 5 1060nm = 6 850nm=8 750nm=7 Special = 0	10nm = 1 20nm=2 30nm = 3 50nm = 5 800nm=8	0.5W = 1 5W = 2 10W =3 Special =0		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 LC = 7 Special = 0

Red – Special Order