

Motorized Fiber Optic Tunable Filter

(patent pending)

Product Description

Based on a proprietary thin film cavity filter technology, Agiltron offers Fiber Optic Tunable Filter with central wavelengths ranging from 450 nm to 2000 nm. It is tunable continuously over a wide spectral range up to 80 nm. Agiltron further offers high optical power handling up to 10 W(CW) while maintaining the transmission spectral shape polarization-insensitive over the whole tuning range. Agiltron's unique high reliability and low insertion loss design presents a most cost-effective solution for OEM applications from fiber optic networks to fiber sensing interrogation. The FOTF has a build-in RS 232 computer control interface.



Features

- Compact and Low Cost
- High Power Handling
- Wide Tune Range
- Wide Wavelength Coverage
- Low IL, PDL & WDL

Performance Specifications

Fiber Optic Tunable Filter	Min	Typical	Max	Unit
Central Wavelength*	-	1060, 1310 or 1550	-	nm
Tuning Range	-	40	80	nm
Tuning Resolution	0.0 2	0.1	-	nm
Tuning Speed	12	-	38	nm/s
Insertion Loss	2	3	4	dB
Bandwidth @-3dB	-	1	1.2	nm
Bandwidth @-20dB	-	10	-	nm
Extinction @ 10 nm Deviation	-	30	-	dB
PDL	-	0.15	0.35	dB
PMD	-	-	0.5	ps
Return Loss	40	-	-	dB
Max. Input Optical Power (CW)	-	1	10	W
Electric Interface	-	RS-232	-	-
Operating Temperature	0	20	70	° C
Size	-	82x66x14	-	mm

Note: * Other wavelengths are available

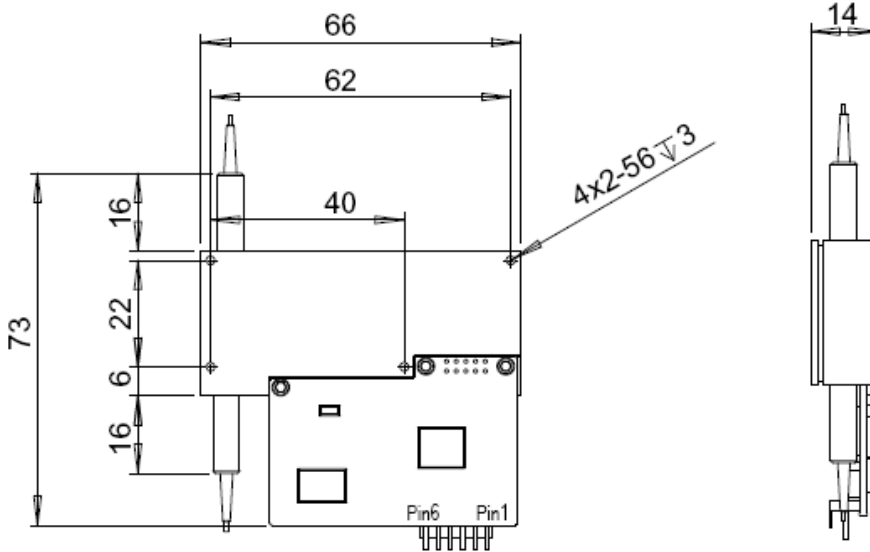
1. Excluding connectors

Applications

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

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Mechanical Dimensions (Unit: mm)



Electrical Driving Requirements

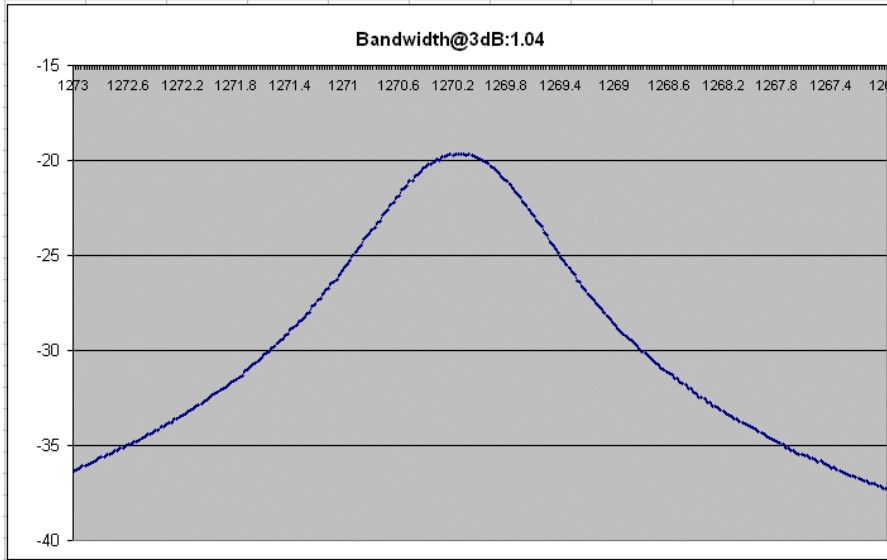
Agiltron offers communication protocols and a computer control kit with RS232 interface and Windows™ GUI

Connector Pin Definition:

Power	Pin 1	GND
	Pin 2	5V
RS232	Pin 3	GND
	Pin 4	Tx
	Pin 5	Rx
	Pin 6	5V

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Typical Transmission Curve



Ordering Information

FOTF-	0 1	<input type="checkbox"/>	1	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Config.	Package	Fiber Type		Fiber Length	Connector
		1310 = 3 1550 =5 1060=6 Special = 0			SMF-28 =1 HI1060=2 Special = 0	Bare fiber =1 900um loose 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