

# Motorized PM Fiber Optic Tunable Filter

(patent pending)

#### **Product Description**

Based on a proprietary thin film cavity filter technology, Agiltron offers PM 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



#### **Performance Specifications**

| Typical        | Max  | Unit  |
|----------------|--|---|
|                |  | Unit  |
| , 1310 or 1550 | -  | nm  |
| 40             | 80   | nm  |
| 0.1            | -  | nm  |
| -              | 38   | nm/s  |
| 3              | 4  | dB  |
| 1              | 1.2  | nm  |
| 10             | -  | nm  |
| 30             | -  | dB  |
| 23             |  | dB  |
| -              | -  | dB  |
| 1              | 10   | W   |
| RS-232         | -  | -   |
| 20             | 70   | °C  |
| 82x66x14       | -  | mm  |
|                | 0.1<br>-<br>3<br>1<br>10<br>30<br>23<br>-<br>1<br>RS-232 | 0.1 -   - 38   3 4   1 1.2   10 -   30 -   23 -   1 10   RS-232 -   20 70 |

Note: \* Other wavelengths are available

#### Features

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

#### Applications

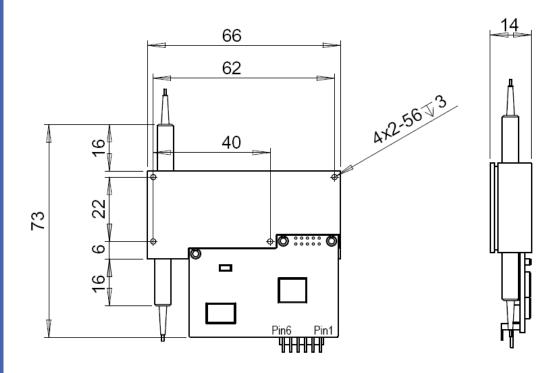
- DWDM networks
- Fiber Sensing
- ASE control
- Tunable Fiber Laser sources

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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^{\rm TM}\,GUI

Connector Pin Definition:

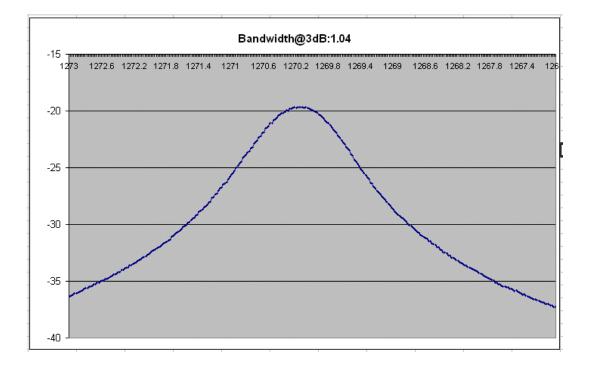
| Dowor | Pin 1 | GND |  |
|-------|-------|-----|--|
| Power | Pin 2 | 5V  |  |
|       | Pin 3 | GND |  |
| RS232 | Pin 4 | Тх  |  |
| R5232 | Pin 5 | Rx  |  |
|       | Pin 6 | 5V  |  |

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## Typical Transmission Curve



## **Ordering Information**

| FOTF- | 0 1  |  | 1       | 2       |   |  |  |  |
|-------|------|--|---------|---------|---|--|--|--|
|       | Туре | Wavelength                                   | Config. | Package | Fiber Type  |  | Fiber Length                                   | Connector  |
|       |      | 1310 = 3<br>1550 =5<br>1060=6<br>Special = 0 |         |         | Panda PM<br>Fiber 400=4<br>Panda PM<br>Fiber 250=5<br>Special = 0 | Bare fiber =1<br>900um loose tube=3<br>Special=0 | 0.25m= 1<br>0.5m = 2<br>1.0 m= 3<br>Special =0 | None = 1<br>FC/PC = 2<br>FC/APC = 3<br>SC/PC = 4<br>SC/APC = 5<br>ST/PC = 6<br>LC = 7<br>Special = 0 |