

Manual Grating-Based Fiber Optic Tunable Filter

(patent pending)

Product Description

Agiltron's Manual Grating-Based Fiber Optic Tunable Filter provides a simple way to adjust the center wavelength of narrow band over wide band. Wavelength tuning is achieved by rotating a grating using a micrometer.

Based on a proprietary optics, Agiltron offers extremely low insertion loss, high stability, polarization independent operation, and high off-band suppression. It is tunable continuously over a wide spectral range. The device presents a most cost-effective solution for OEM applications from fiber optic networks to fiber sensing interrogation.



Performance Specifications

| Parameter | Min | Typical | Max | Unit |
|----------------------------------|-----------------|-----------|-----------|------|
| Wavelength Tuning Range | 1060 ± 15 | 1500 ± 20 | 2000 ± 20 | nm |
| Tuning Resolution | - | 0.02 | - | nm |
| Insertion Loss* | 1.1 | - | 1.6 | dB |
| Bandwidth @-3dB | - | 0.25 | - | nm |
| Bandwidth @-20dB | - | 0.75 | - | nm |
| Polarization Dependent Loss | - | 0.25 | - | dB |
| Extinction Ratio (PM fiber only) | - | 20 | - | dB |
| Off-Band Suppression | - | 45 | - | dB |
| Polarization Mode Dispersion | - | - | 0.5 | ps |
| Return Loss | 40 | - | - | dB |
| Optical Power Handling (CW) | - | - | 500 | mW |
| Operating Temperature | 0 | 20 | 60 | ° C |
| Storage Temperature | -10 | | 70 | ° C |
| Dimension | 88 x 32 x 24 mm | | | |

* Excluding connectors loss

Features

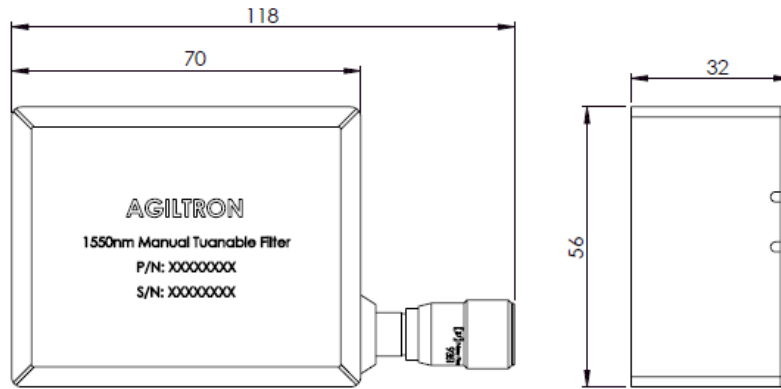
- Extremely low insertion loss
- Wide Tune Range
- High off-band suppression
- Uniform bandwidth
- High tuning resolution
- Compact and cost-effective

Applications

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

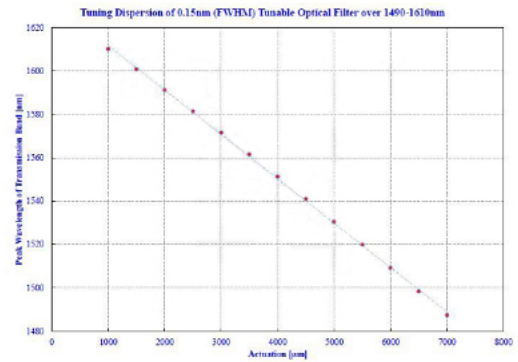
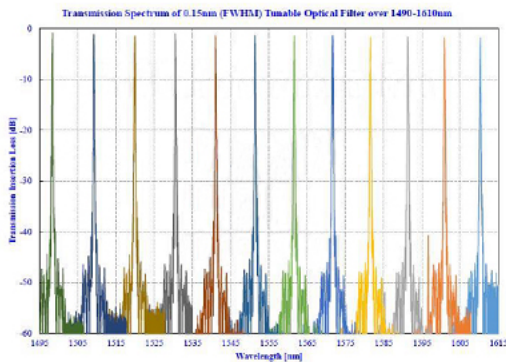
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Mechanical Dimensions (mm)



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

Spectrum



Ordering Information

| | | | | | | | | |
|-------|------|---|---------|---------|------------------------------|---------------------------------|--|--|
| FOTF- | 0 3 | <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 |
| | | 1060nm=1 1310nm=3 1550nm = 5 1600nm = 6 2000nm =2 | | | SMF-28 =1 Panda PM1550 =5 | 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 |