

## Manual Fiber Optic Tunable Filter

(Simple the best tunable filter in the world)

Optical tunable filter with model number **OEF TF-100** is a thin film based manual tunable filter. With extremely low PDL, high wavelength resolution, high off and rejection and low return loss, **OEF TF-100** is a high performance, low cost manual fiber optic tunable filter. The typical bandwidth of the **OEF TF-100** are from 0.8nm to 12nm.

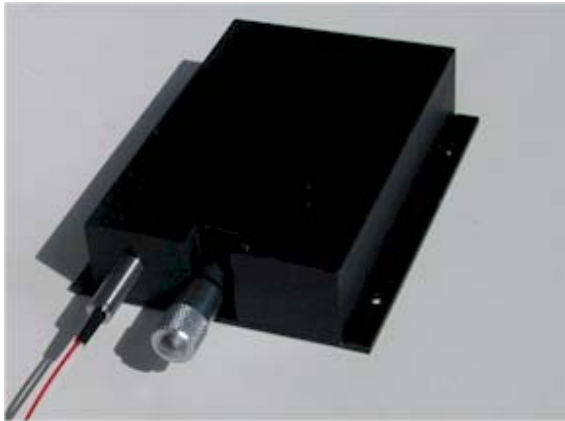


Figure 1. Manual Tunable Thin Film Filter

### Main Specifications of 0.8nm Bandwidth **OEF TF-100**:

| Specifications              | Unit |   |
|-----------------------------|------|---|
| Wavelength Tuning Range*    | nm   | >40 over C-band.                          |
| Pass Band Width @ -3dB**    | nm   | <= 0.8 (typical)                          |
| Insertion Loss              | dB   | < 4.0                                     |
| Resolution                  | nm   | 0.03                                      |
| Polarization Dependent Loss | dB   | < 0.1                                     |
| Return Loss                 | dB   | > 50                                      |
| Off Band Rejection          | dB   | > 40                                      |
| Power Handling              | mW   | > 500                                     |
| Operation Temperature       | °C   | - 5 ~ + 70                                |
| Storage Temperature         | °C   | -40 ~ 85                                  |
| Dimension                   | mm   | 56 x 85 x 20                              |
| Maximum tension load        | N    | 5   |
| Fiber Type of pigtail       |      | 1 meter long, SMF-28 with 900 micron tube |

\* Other bands are available on request.

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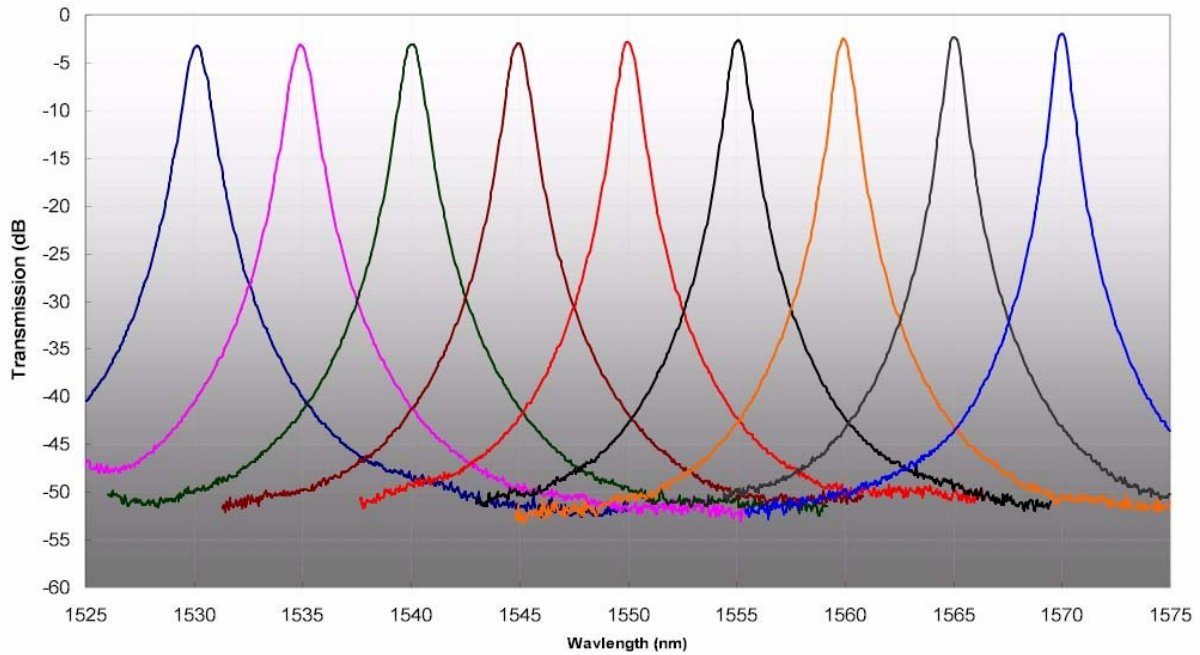


Figure 2. Typical Spectral Curve of 0.8nm Manual Tunable Thin Film Filter

**Main Specifications of 3.0nm Bandwidth OEFTF-100:**

| Specifications              | Unit |   |
|-----------------------------|------|---|
| Wavelength Tuning Range*    | nm   | 1520nm – 1570nm                           |
| Pass Band Width @ -3dB**    | nm   | ~3.3 – 3.8nm (FWHM)                       |
| Max. Insertion Loss         | dB   | < 2.90                                    |
| Resolution                  | nm   | 0.03                                      |
| Polarization Dependent Loss | dB   | < 0.06                                    |
| Return Loss                 | dB   | > 55                                      |
| Off Band Rejection          | dB   | > 40                                      |
| Power Handling              | mW   | > 500                                     |
| Operation Temperature       | °C   | - 5 ~ + 70                                |
| Storage Temperature         | °C   | -40 ~ 85                                  |
| Dimension                   | mm   | 56 x 85 x 20                              |
| Maximum tension load        | N    | 5   |
| Fiber Type of pigtail       |      | 1 meter long, SMF-28 with 900 micron tube |

\* RoHS compliant

\*\* Other bandwidth are available on request.

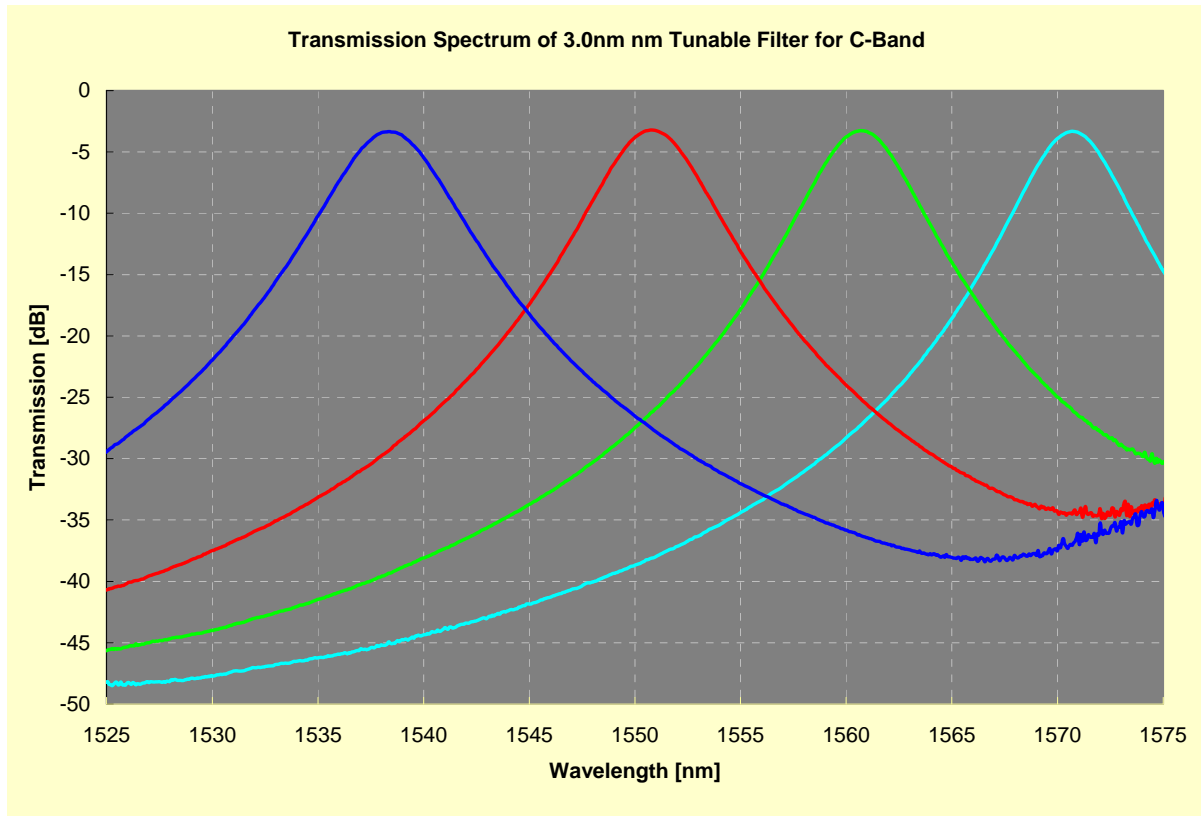


Figure 3. Typical Spectral Curve of 3.0nm Manual Tunable Thin Film Filter

### Applications:

- Telecommunication
- Instrumentation
- Optical Signal Filter
- Biomedical
- Fiber optic sensing