

[OEFBG-TUN-FTU]

Fast Tunable Fiber Bragg Grating Filter

Features:

- Fast tunable up to 1kHz
- Custom filter FBG specifications*
- Transmission (standard) or reflection mode
- Integrated optical circulator (optional)
- SM or PM fiber
- Receptacle FC/APC connectors (standard)
- Long lifetime and low insertion loss
- High reliability and repeatability
- OEM or Turnkey solution

Product description:

The Fast Tunable Fiber Bragg Grating filter (OEFBG-TUN-FTU) offers fast tunable features via piezo stage for tuning FBG center wavelength in a compact package. It can provide fast tunable up to 1kHz (higher speed is also an option) in a stable tunable range, simple structure, high resolution, and long lifetime. The fast tunable filter uses Fiber Bragg Grating technology which can be both used in transmission and reflection mode, or in reflection mode only (by request). As an option, an optical fiber circulator can be integrated to provide a bandpass signal to the output port. Circulators are available at the visible, near infrared and mid-infrared wavelength ranges.

FBG specifications can be customized, although some limitations apply. The Tunable FBG can be used as wavelength modulation, tunable fiber laser, fiber sensor system, and in any other custom applications, where fast tuning of the center wavelength is required.

Product specifications:

| Parameters | Unit | OEFBG-TUN-FTU |
|------------------------|------|-----------------------------|
| Center wavelength | nm | 650-2100 |
| Tuning range@100Hz | GHz | 20 |
| Maximum tuning speed | kHz | 1 |
| Insertion loss | dB | <0.5 |
| Out band suppression | dB | 10-30 |
| Optical power handling | mW | 500 |
| Connectivity | - | Receptacle or fiber pigtail |
| Fiber type | - | SM, PM |
| Operating Temp. | °C | 15-50 |
| Storage Temp. | °C | 5-70 |
| Dimension | mm | 300x150x50 |

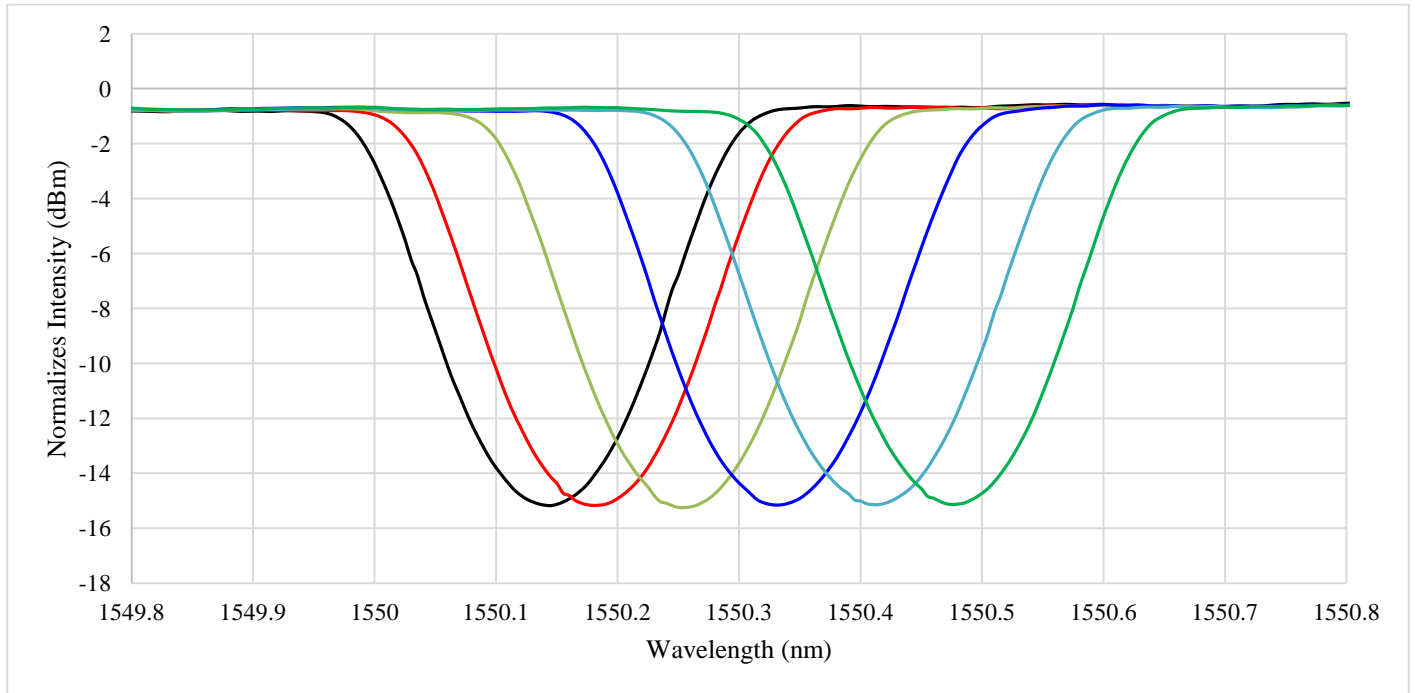


Fig 1: FBG transmission spectra over the tuning range.

Ordering number:

| OEFBG-TUN-FTU-WL-TR-BW- Type: | WL | TR | BW | Type |
|--|---------------------------|----------------------|-----------------|----------------------------|
| | Wavelength (nm) | Tuning range (nm) | 3-dB BW (nm) | E: electrical M: manual |
| Example: | OEFBG-TUN-FTU-1550-10-0.5 | | | |