

# TH-GFF Gain Flattening Filter

#### **Features:**

- C and L band coverage
- Error function down to ±0.1 dB over the spectral range
- Low insertion loss
- Ultra compact athermal package

#### **Benefits:**

- Gain uniformity over the spectral range
- Reliable operation of optical amplifier throughout the operating temperature range
- Small dimensions facilitates amplifier packaging

TeraXion is proud to present its TH-GFF Gain Flattening Filter (GFF). Based on short period Fiber Bragg grating (FBG) technology, our ultra compact TH-GFF can be used to flatten the gain of rare-earth doped fiber or Raman amplifiers for any required spectral range with unmatched performance. The spectrally adjusted FBG allows filter to cover the C and L transmission bands. The TH-GFF is also suitable for high power amplifiers.

TeraXion uses its proprietary athermal packaging technology (patent pending) to maintain the TH-GFF performances over the entire operating temperature range.



Parameter	Typical Value
Model number	TH-GFF
Wavelength range	1520 to 1620 nm
Target spectral profile	Customer specified
Error function <sup>1</sup>	±0.1 to ±0.25 dB
Insertion loss <sup>1</sup>	< 0.8 dB
Operating temperature range	-20 to +70°C
Thermal wavelength drift <sup>2</sup>	< 1 pm/°C
Package dimensions <sup>3</sup>	4.8 mm (Ø) X 55 mm (L)
Fiber type	Standard single-mode compatible
Standard fiber length	1 m (each side)

<sup>&</sup>lt;sup>1</sup>Strongly related to the target profile.

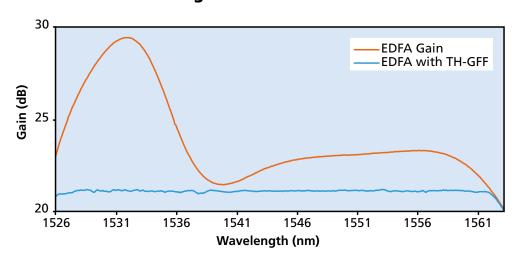


<sup>&</sup>lt;sup>2</sup>Average slope from +25°C to operating temperature limits; only with our proprietary athermal package.

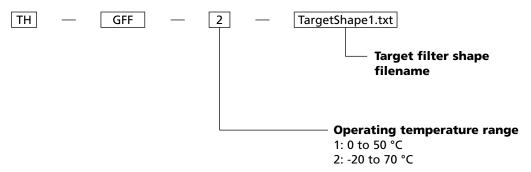
<sup>&</sup>lt;sup>3</sup>Some target profiles may require longer packages.

All TeraXion products are entirely manufactured in a clean room environment and designed to meet Telcordia™ GR-1209 and GR-1221 standards. Each individual filter is shipped with its own data sheet. Evaluation samples and volume quantities are readily available.

## **TH-GFF Gain Flattening Filter**



### **Ordering Information**



Connectors are available upon request.

Contact us at sales@teraxion.com if you have any questions or specific requirements or wish to learn more about our products.

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Channeling the optical bandwidth™

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