EquinoxTM Variable Gain Tilt Filter

Solid-state, High-speed Gain Equalization and Tilting



Boston Applied Technologies' Variable Gain Tilt Filter (VGTF) is designed for dynamically compensating the gain tilt profile in Erbium Doped Fiber Amplifiers (EDFAs) and power tilt in multi-channel wavelength division multiplexing (WDM) systems. Based on OptoCeramic® technology, VGTF enables dynamically flattening or tilting the broadband signal in a real-time fashion. BATI's VGTF contains no moving parts and offers high speed, low insertion loss, low polarization dependence loss (PDL), and a wide dynamic range. BATI's advanced micro-optical design also enables the integration of the static gain flattening filter (GFF) and other components into one compact and robust package for space and cost savings and performance enhancement.

Features

- Precise, high-speed, real time gain control
- Excellent optical performance
- Low cost, flexible integration
- All solid-state construction in a compact package

Applications

- Dynamic gain tilt adjustment
- EDFA



Key Optical Specifications

Attributes ^{1,2}	Performance
Wavelength Range	1525-1565 nm, 1570- 1610 nm
Insertion Loss	<1.0 dB
Dynamic Tilt Range	$\pm 4 \text{ dB}^3$
Response	$< 100 \mu s$
Polarization Dependent Loss	$< 0.15 \text{ dB}^4$
Polarization Mode Dispersion	< 0.05 ps
Slope Resolution	Continuous
Input Power	< 300 mW
Return Loss	≥ 55 dB
Dimensions	36.6 x 16 x 8 mm
Operating Temperature Range	0°C to 70°C
Storage Temperature Range	-40°C to 85°C

Notes:

- 1. Unless otherwise specified, all measurements are at 25°C.
- 2. Meets or exceeds Telcordia GR1221 and GR1209 specifications.
- 3. Up to 10 dB tilting achievable, 20 dB tilting also available upon request.
- 4. Measured at \pm 4 dB tilting.

For More Information

For More information about Boston Applied Technologies' leadership in dynamic gain equalization technology and other fiber optical modules and components, visit our website at www.bostonati.com.

To obtain additional technical information or to place an order for this product, please contact us:

Phone: 1-781-935-2800 Fax: 1-781-935-2860

E-mail: sales@bostonati.com

Boston Applied Technologies, Incorporated, 150H New Boston Street, Woburn, MA 01801 USA. Any information contained herein shall legally bind BATI only if it is specifically incorporated into the terms and conditions of a sales agreement. This product information is subject to change without notice. OptoCeramic is a registered trademark of Corning Incorporated,