

Gain Flattening Filter Chips

Bookham Gain Flattening Filters (GFF) leverage the proprietary Advanced Energetic Deposition (AED) process to produce the industry's lowest error GFF. The AED process features state-of-the-art layer thickness control enabling custom gain profiles to be closely replicated over multiple production runs. Low loss custom designs can be made for erbium doped fiber amplifier (EDFA) bands in the C and L bands. Designs for Raman-based amplification are also available.

Bookham has developed software design tools to synthesize custom gain profiles and assess their manufacturing robustness. When you work with Bookham on your GFF design, you will have an expert design team on your side.

Features:

- Lowest error in the industry; typically 0.2 to 0.4dB
- 1450 to 1640nm wavelength coverage
- High maximum to minimum loss contrast
- Low loss
- Low chromatic dispersion
- Excellent temperature stability

Options:

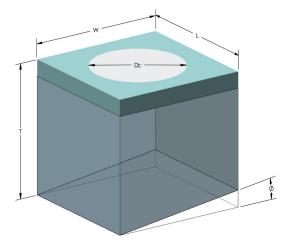
· Custom gain profiles

Applications:

- EDFA gain flattening for both C-band and L-band
- · Raman amplification
- Metro and long-haul DWDM

Compliance:

- GR-1221 qualified with additional high power testing
- RoHS compliant





Gain Flattening Filter

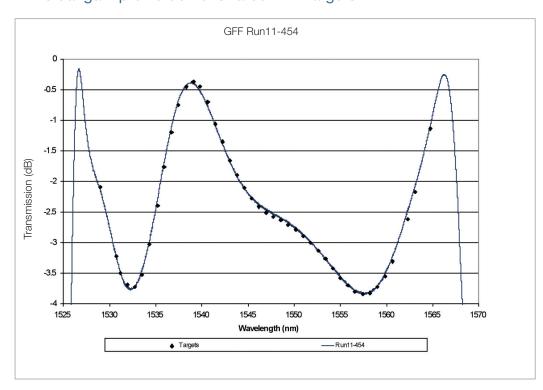
Specifications (valid over operating temperature)

Component Parameters	Specification	Unit
Wavelength Range	1460 to 1640	nm
Insertion Loss (peak)	0.3	dB
Target Gain Profile	customer supplied gain profile	
Peak to Peak Error Function[1] (min)	0.2 - 0.4 (gain profile dependent)	dB
Polarization Dependent Loss	0.1	max dB
Return Loss	50	min dB
Dimensions (LxWxT)	1.4 x 1.4 x 1.0	mm
Backside Wedge Angle (Ф)	0.25	deg
Operating Temperature	-5 to 70	°C
Storage Temperature	-40 to 85	°C
Price	Contact us for quote	

 $^{^{\}left[1\right]}$ Actual function error is dependent on specified gain profile. Edge Chips <0.1mm

Example Performance

Actual gain profile demonstrated with targets





RoHS Compliance





Bookham is fully committed to environment protection and sustainable development and has set in place a comprehensive program for removing polluting and hazardous substances from all of its products. The relevant evidence of RoHS compliance is held as part of our controlled documentation for each of our compliant products. RoHS compliance parts are available to order, please refer to the ordering information section for further details.

Ordering Information:

Gain Flattening Filter Chip numbering convention

TFGFF<u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u>



4 digit SPEC# provided by Bookham

Please contact Bookham for a quote.

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