

200GHz WDM Filter Components for OADM

Bookham narrowband filters leverage the proprietary Advanced Energetic Deposition (AED) process to produce the industry's best banded filter solution. The AED process features state-of-the-art layer thickness control to produce thin-film interference filters that are unparalleled for optical add/drop multiplexing (OADM) WDM applications. A range of 200GHz single channel filters are available.

200 Standard

This product is intended for construction of multiplexer and demultiplexer systems. It provides high performance and lowest cost.

200 OADM

This product features improved performance for reflection isolation, transmission isolation and chromatic dispersion. This part is designed for more demanding applications such as channel by channel optical add/drop multiplexing or lower chromatic dispersion mux/demux designs.

Standard 5.5mm diameter packaging is available with the boot/length specification needed to meet your application. The optional compact packaging has diameter of only 3.2mm. All Bookham filter components are Telcordia GR-1221 qualified and 5/6 RoHS compliant.



Features

- 64GHz clear channel passband
- ITU and custom wavelengths
- Deep reflection isolation for OADM
- Accurate wavelength centering
- High adjacent channel transmission isolation
- Low express channel loss
- Flat transmission passband for cascading
- Excellent temperature stability

Options

- 66GHz clear channel passband
- · Custom wavelength
- Low chromatic dispersion version
- Compact packaging: 3.2mm diameter
- Rugged packaging

Applications

- Add/drop multiplexing
- Metro and long-haul WDM

Compliance

- · GR-1221 qualified
- RoHS compliant (5/6)



200GHz Filters

Typical design specifications (valid over operating temperature)

Transmitted Channels	Standard	OADM	unit
Clear Channel Passband	64	64	GHz
Insertion Loss ^a	1.0	1.0	dB
Insertion Loss Variation	0.3	0.2	dB
Adjacent Band Isolation	30	30	dB
Polarization Dependent Loss	0.15	0.1	dB
Return Loss	45	45	dB
Chromatic Dispersion ^b	±15	±8	ps/nm
Directivity	45	45	dB
Reflected Channel	•		
Insertion Loss ^a	0.4	0.4	dB
Insertion Loss Variation	0.15	0.1	dB
Polarization Dependent Loss	0.15	0.1	dB
Reflection Isolation ^b	12	16	dB
Chromatic Dispersion ^b	±5	±4	ps/nm
Directivity	45	45	dB
Component Parameters			
Operating Temperature	-5 to	-5 to 70	
Storage Temperature	-40 to	-40 to 85	
Dimensions ^c (standard packaging)	5.5 (Ø)	5.5 (Ø) x 51 (L)	

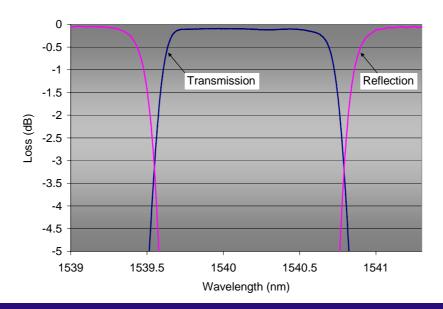
^a Loss includes connector pair.

^b At edge of clear channel passband.

^c Nominal overall length. Standard package length without boots nominally 35mm.

Example Performance

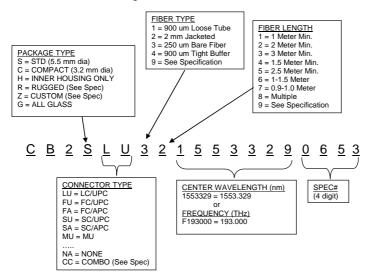
200GHz OADM filter performance





Ordering Information

200GHz Filter numbering convention



North America

Bookham Worldwide Headquarters

2584 Junction Ave. San Jose CA 95134 USA

• Tel: +1 408 919 1500

• Fax: +1 408 919 6083

Europe

Paignton Office

Brixham Road Paignton Devon TQ4 7BE United Kingdom

• Tel: +44 (0) 1803 66 2000

• Fax: +44 (0) 1803 66 2801

Asia

Shenzhen Office

2 Phoenix Road Futian Free Trade Zone Shenzhen 518038 China

• Tel: +86 755 33305888

• Fax: +86 755 33305805 +86 755 33305807

sales@bookham.com

Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by Bookham before they become applicable to any particular order or contract. In accordance with the Bookham policy of continuous improvement specifications may change without notice. The publication of information in this data sheet does not imply freedom from patent or other protective rights of Bookham or others. Further details are available from any Bookham sales representative.

200G_060320