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 70		°C
Storage Temperature	-40 to 85		°C
Dimensions[c] (standard packaging)	5.5 (Ø) x 51 (L)		mm

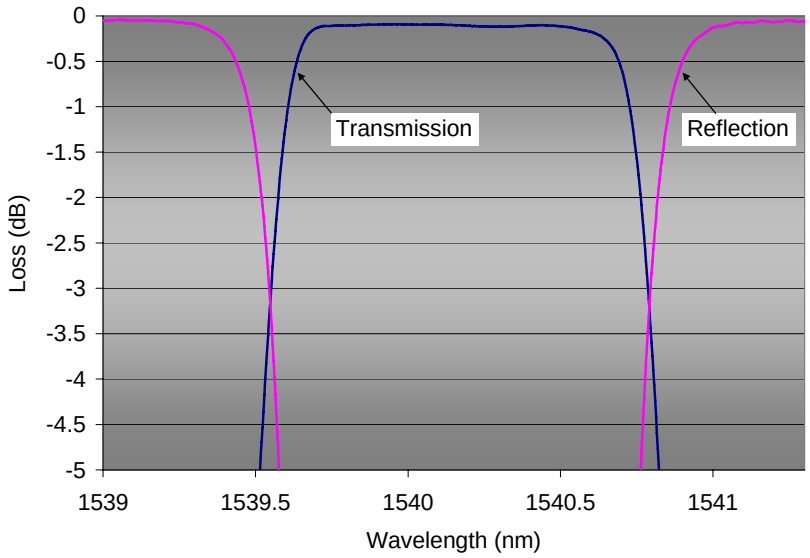
[a] *Loss includes connector pair.*

[b] *At edge of clear channel passband.*

[c] *Nominal overall length. Standard package length without boots nominally 35mm.*

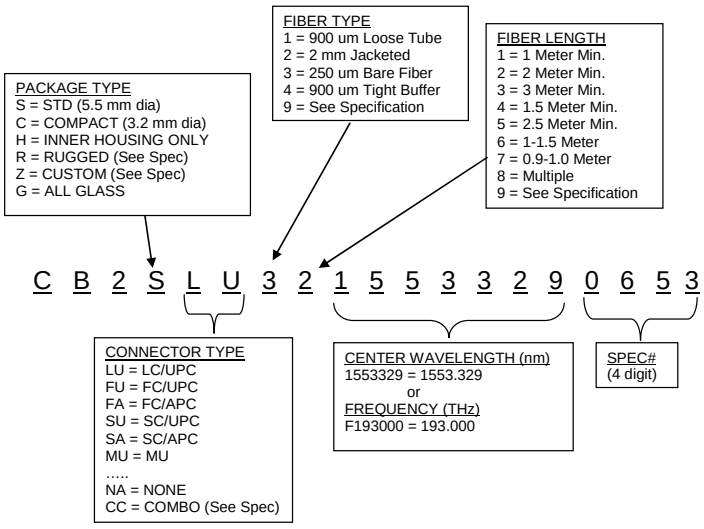
Example Performance

200GHz OADM filter performance



Ordering Information

200GHz Filter numbering convention



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