

Band Filters for 200GHz Add/Drop Multiplexing

Bookham band skip 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.

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

- 4-skip-0, 4-skip-1, & 4-skip-2 filters available
- Deep reflection isolation for minimized coherent crosstalk
- Low express channel loss
- Flat transmission passband for cascading
- Fewer skipped channels
- Excellent temperature stability

Options

- Custom skip designs available
- Compact packaging: 3.2mm diameter
- Rugged packaging

Applications

- Add/drop multiplexing
- Metro and long-haul WDM
- Banded Mux/Demux

Compliance

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



Band Filters for 200GHz

Typical design specifications (valid over operating temperature)

Transmitted Channels	4-skip-0	4-skip-1	4-skip-2	unit
Clear Channel Passband	666	666	666	GHz
Insertion Loss ^a	1.0	1.0	1.0	dB
Insertion Loss Variation	0.3	0.3	0.2	dB
Adjacent Band Isolation	25	25	25	dB
PDL over Clear Channel	0.15	0.1	0.1	dB
Return Loss	45	45	45	dB
Reflected Channel			•	
Insertion Loss ^a	0.45	0.45	0.45	dB
PDL	0.15	0.1	0.1	dB
Reflection Isolation ^b	15	15	20	dB
Directivity	45	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 Loop includes connector pair				

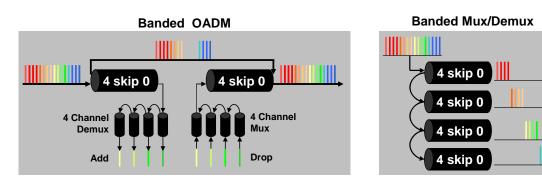
^a Loss includes connector pair.

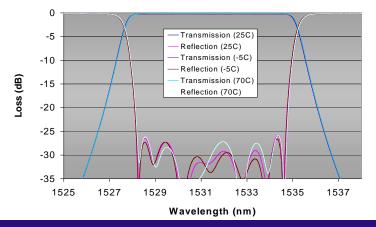
^b At edge of clear channel passband

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

Example Applications and Performance

Banded 4-skip-0 applications and 4-skip-0 performance at -5C, 25C, and 70C







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B200_060320

1 = 900 um Loose Tube2 = 2 mm Jacketed FIBER LENGTH 1 = 1 Meter Min. 3 = 250 um Bare Fiber 4 = 900 um Tight Buffer 2 = 2 Meter Min. PACKAGE TYPE 3 = 3 Meter Min. S = STD (5.5 mm dia) C = COMPACT (3.2 mm dia) H = INNER HOUSING ONLY 9 = See Specification 4 = 1.5 Meter Min 5 = 2.5 Meter Min. 6 = 1-1.5 Meter R = RUGGED (See Spec) Z = CUSTOM (See Spec) ' = 0.9-1.0 Meter 8 = Multiple G = ALL GLASS 9 = See Specification <u>C B W</u> <u>S</u> U <u>3</u> <u>2</u> <u>1 5 5 3 3 2 9</u> CENTER WAVELENGTH (nm) 1553329 = 1553.329

FIBER TYPE

or FREQUENCY (THz) F193000 = 193.000

CONNECTOR TYPE LU = LC/UPC FU = FC/UPC FA = FC/APCSU = SC/UPCSA = SC/APC MU = MU

Ordering Information

Band Filter numbering convention

NA = NONE CC = COMBO (See Spec)