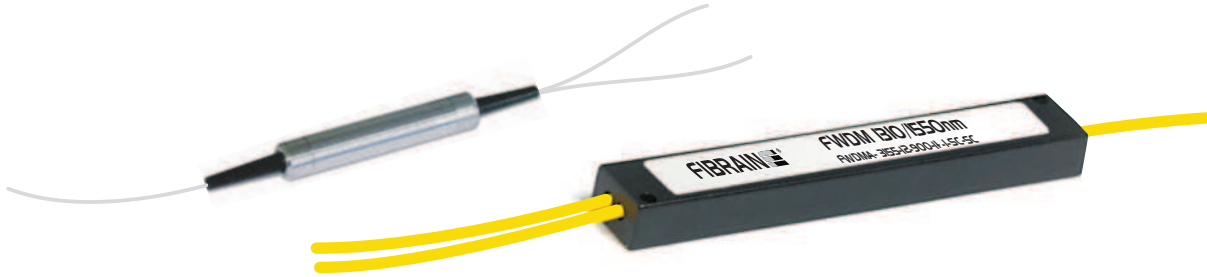


Optical elements - WDM

FWDM passive solutions - multiplexers

02



FWDM passive solutions - multiplexers

Fibrain FWDM (Filter Wavelength Division Multiplexer) series multiplexers utilize the TFF (Thin Film Filter) technology. The TFF technology allows obtaining low insertion loss and flat loss spectral profile, high interchannel isolation and very good temperature stability. Thanks to the flexibility, filters with different characteristics are available.

Applications:

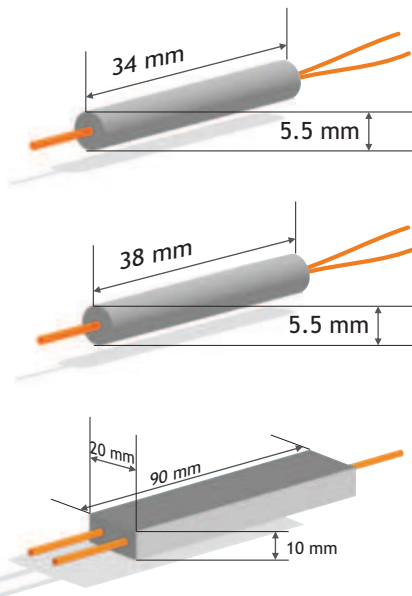
- bidirectional WDM systems,
- telecommunication networks,
- CATV networks.

Features:

- high thermal stability of parameters,
- low insertion loss and polarization loss,
- high channel isolation.

Examples of technical specification for typical FWDM filters			
Type	1310/1550 nm	1480/1550 nm	1550/1310 & 1490 nm
Transmission port bandwidth	1260-1360 nm (1520-1600 nm)	1440-1490 nm (1530-1580 nm)	1550-1600 nm
Reflection port bandwidth	1520 nm-1600 nm (1260-1360 nm)	1530-1580 nm (1440-1490 nm)	1260-1360 nm & 1460-1500 nm
Transmission port IL [dB]	<=0.6	<=0.6	<=0.6
Reflection port IL [dB]	<=0.5	<=0.5	<=0.5
Transmission port isol. [dB]		>30	
Reflection port isol. [dB]	>15	>15	>20
PDL [dB]		0.1	0.15
PMD [ps]		0.1	
Directivity [dB]		>=50	
RL [dB]		>= 50	
Thermal stability		0.005 dB/°C	
Storage temperature		-40 °C to +85 °C	
Operating temperature		-20 °C to +70 °C	
Fiber type		SM 09/125 G.652D	
Max. optical power [mW]		300	
Casing:			
Fiber type	250 µm	900 µm	900 µm, 2.0 mm or 3.0 mm
Dimensions	Ø 34x5.5 mm	Ø 38x5.5 mm	90x20x10 mm

Other filter types (for example MM850/1300, 980/1550, 310/1480, 1510/1550, FTTH/OTDR and FTTH/CATV triplexers, other special CATV filters) also available. High isolation version (isolation >45 dB for both channels) on request.



Quality: S0/S1 G0/G1 T0/T1 P0/P1	Split: 12 - 1x2	Wavelength: 3155 - 1310/1550 9855 - 980/1550 4855 - 1480/1550 5538 - 1550/1310 & 1480 xxxx - other	Casing type: 1 - 5.5x34 mm pipe 2 - 5.5x38 mm pipe 3 - 5.5x40 mm pipe 4 - 90x20x10 mm minibox 5 - 100x12x8 mm minibox
FWDM - G0 - 1 - 12 - 0 - 3155 - 90 - 1 - SC - SC	Fiber: 1 - G652D 2 - G657A 7 - HI 1060	Length: 0 - 0.5 m 1 - 1 m 2 - 2 m	Fiber type: 25 - 250 µm 90 - 900 µm 20 - 2.0 mm 30 - 3.0 mm
	Connector type: ST SC SCA FC FCA LC LCA E20 E2A x - other	Connector type: ST SC SCA FC FCA LC LCA E20 E2A x - other	

FWDM-G0-1-12-0-3155-25-1-SC-SC

Example: Fibrain FWDM multiplexer, 1310/1550 channels, 1x2 port configuration, 900 µm pigtailed, pigtail length 1 m, Ø 34x5.5 mm pipe packaging, SC/SC connectors.