Polarization Maintaining Bandpass Filter

Description

The bandpass filter uses a high-performance thin-film filter to ensure high-quality optical performance and stability. Designed to suppress noise signals in EDFA and fiber laser systems, they feature high isolation, low insertion loss, high return loss, and high power handling capabilities.

Firsol offers customized fiber filters tailored to specific requirements regarding wavelength, bandwidth, power rating, and fiber type. These products are widely used in fields such as fiber lasers, fiber amplifiers, underwater laser communication, fiber sensing, and scientific research.

Features

Low Insertion Loss
High Channel Isolation
High Stability and Reliability
Compact Structure

Applications

Fiber Laser
Fiber Amplifier
Fiber Optic Sensing
Fiber Optic Communication

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Specifications

Parameter	Unit	Value
Center Wavelength	nm	Refer to the table below.
Min Pass Bandwidth	nm	
Min Stop Bandwidth	nm	
Isolation	dB	≥25
Insertion Loss	dB	≤0.8
Return Loss	dB	≥50
Extinction Ratio	dB	≥20
Max Optical Power (CW)	W	0.5/1/2/5/10
Fiber Type	-	PM980/PM1550/PM1950
Working Axis	-	Both Axis
Package Dimensions	mm	Φ5.5 x L35
Operating Temperature	°C	-5 to +70
Storage Temperature	°C	-40 to +85

Notes: Tested at 25 °C. Data exclude connectors. Adding connectors will increase insertion loss by approximately 0.3 dB, reduce return loss by 5 dB, and decrease extinction ratio by 2 dB. The fiber slow axis is aligned to the key by default.

Wavelength specifications

Center Wavelength (nm)	Min Pass Bandwidth (nm)	Min Stop Bandwidth (nm)
1030	2	6 @25dB down
	6	10 @25dB down
1040	2.2	6 @25dB down
1053	2	6 @25dB down
1064	2	6 @30dB down
	5	12 @30dB down
	8	20 @30dB down
1080	2	6 @25dB down
1550.12	0.2	0.5 @25dB down
	0.4	0.8 @25dB down
	0.8	1.2 @25dB down
1550	2	6 @30dB down
	5	12 @30dB down
	10	20 @30dB down
	15	25 @30dB down
1950	20	1850-1930mn & 1970-2050nm

Notes: Other center wavelengths and bandwidths can also be customized, but MOQ is required, please contact us.

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Product Dimensions

Ordering Information

□nm	□nm	□W	□	□	□m	□μm	□
Center Wavelength	**Min Pass Bandwidth**	**Max Optical Power (CW)**	**Working Axis**	**Fiber Type**	**Pigtail Length**	**Pigtail Diameter**	**Connector**
1030nm	0.2nm	0.5W	Both Axis	PM980	0.5m	250μm Bare Fiber	None
1040nm	0.4nm	1W		PM1550	1.0m	900μm Loose Tube	LC/UPC
1053nm	0.8nm	2W		PM1950	1.5m		LC/APC
1064nm	2nm	5W			2.0m		SC/UPC
1550nm	2.2nm	10W					SC/APC
1550.12nm	5nm						FC/UPC
1950nm	6nm						FC/APC
	8nm						ST/UPC
	10nm						ST/APC
	15nm						

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