

C-Band/L-Band Single Mode FWDM



Description

The C-Band/L-Band Single Mode Filter WDM, also known as C-Band/L-Band Single Mode FWDM, is a thin film filter-based wavelength division multiplexer designed to combine or separate C-band and L-band optical signals in single mode fiber systems. It provides low insertion loss, high channel isolation, and stable optical performance, making it suitable for DWDM transmission, C+L band optical networks, optical amplifiers, fiber sensing, and test applications.

Features

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

Applications

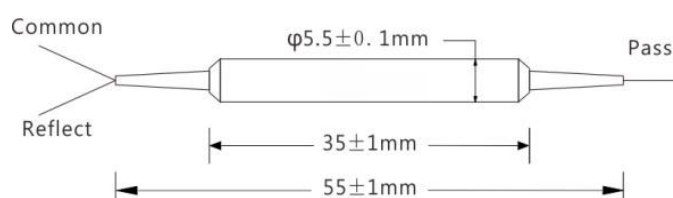
- Fiber Laser
- Fiber Optic Amplifier
- Fiber Optic Sensing
- Underwater Communication

Specifications

Parameter	Unit	Value	
Pass Channel Wavelength Range	nm	1570~1610 (L-Band)	1500~1562 (C-Band)
Pass Channel Insertion Loss	dB	≤0.8	
Pass Channel Isolation	dB	≥25	
Reflect Channel Wavelength Range	nm	1500~1562 (C-Band)	1570~1610 (L-Band)
Reflect Channel Insertion Loss	dB	≤0.6	
Reflect Channel Isolation	dB	≥12	
Polarization Dependent Loss	dB	≤0.1	
Return Loss	dB	≥50	
Max Optical Power (CW)	W	0.3	
Fiber Type	-	SMF-28e	
Tensile Load	N	5	
Package Dimensions	mm	Φ5.5 x L35	
Operating Temperature	°C	-5 to +70	
Storage Temperature	°C	-20 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. Pass Channel Wavelength and Reflect Channel Wavelength can be interchanged while all other specifications remain unchanged.

Product Dimensions



Ordering Information

					
Center Wavelength	Max Optical Power (CW)	Fiber Type	Pigtail Length	Pigtail Diameter	Connector
C-Band Pass/L-Band Reflect	0.3W	SMF-28e	0.5m	250μm Bare Fiber	None
L-Band Pass/C-Band Reflect			1.0m	900μm Loose Tube	LC/UPC
			1.5m		LC/APC
			2.0m		SC/UPC
					SC/APC
					FC/UPC
					FC/APC
					ST/UPC
					ST/APC