

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

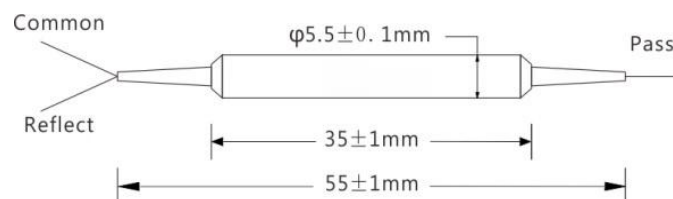
- Fiber Laser
- Fiber Optic Amplifier
- Fiber Optic Sensing
- Underwater Communication

Specifications

Parameter	Unit	Value	
Pass Channel Wavelength Range	nm	1570~1610 (L-Band)	1500~1562 (C-Band)
Pass Channel Insertion Loss (Max.)	dB	0.8	
Pass Channel Isolation (Min.)	dB	25	
Reflect Channel Wavelength Range	nm	1500~1562 (C-Band)	1570~1610 (L-Band)
Reflect Channel Insertion Loss (Max.)	dB	0.6	
Reflect Channel Isolation (Min.)	dB	12	
Polarization Dependent Loss	dB	≤0.1	
Return Loss (Min.)	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

<input type="checkbox"/> nm	<input type="checkbox"/> W	<input type="checkbox"/>	<input type="checkbox"/> m	<input type="checkbox"/> μm	<input type="checkbox"/>
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

WWW.FIRSOL.COM