

1550/1590 nm Filter Wavelength Division Multiplexers



Key Features

- Thin film filter based
- Wide bandwidth
- Low insertion loss
- High isolation
- Low temperature dependent loss
- Epoxy-free optical path

Applications

- Ultra wideband EDFAs
- High channel count systems
- Extended band systems

Compliance

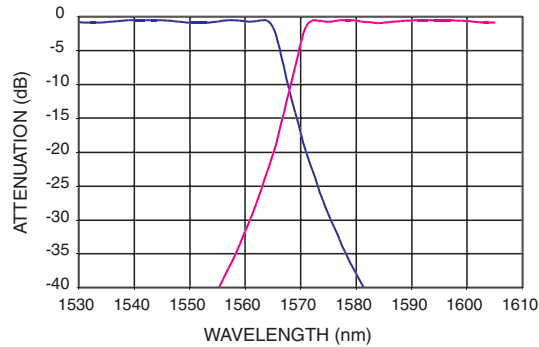
- Telcordia GR-1221

JDSU 1550/1590nm filter wavelength division multiplexers (WDMs) are specifically designed to multiplex or demultiplex C- and L-band optical signals in dual-band erbium doped fiber amplifier (EDFA) systems.

Assembled using interference filter technology, these stable and reliable filter WDMs have high channel isolation, low insertion loss, low temperature dependent loss, and low polarization dependent loss.

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Transmission (C↔P)



Specifications

Parameter	Pass 1550/Reflect 1590	Pass1590/Reflect 1550
Pass port (C↔P) wavelength range λ_P	1528 to 1563 nm	1570 to 1610 nm
Pass port (C↔P) insertion loss	Maximum	0.6 dB
Pass port (C↔P) flatness	Maximum	0.3 dB
Pass port (C↔P) isolation at λ_R	Minimum	20 dB
Reflect port (C↔R) wavelength range λ_R	1570 to 1610 nm	1528 to 1563 nm
Reflect port (C↔R) insertion loss	Maximum	0.4 dB
Reflect port (C↔R) flatness	Maximum	0.15 dB
Reflect port (C↔R) isolation at λ_P	Minimum	12 dB
Directivity	Minimum	55 dB
Optical return loss	Minimum	50 dB
Polarization dependent loss	Maximum	0.05 dB
Polarization mode dispersion	Maximum	0.1 ps
Temperature dependent loss	Maximum	0.1 dB
Optical power	Maximum	500 mW
Tensile load	Maximum	5 N
Operating temperature		-5 to 75 °C
Storage temperature		-40 to 85 °C
Package dimensions (D x L)		
250 μ m fiber		5.5 x 30 mm (Standard), 3.2 x 30 mm (Miniature)
900 μ m fiber		5.5 x 40 mm (Standard), 3.2 x 40 mm (Miniature)
Fiber length		>1.0 m

Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Sample: FWS-F00110000

FWS- F00

Code	Wavelength
F	1550/1590 nm

Code	Model
1	Pass 1550/reflect 1590
2	Pass 1590/reflect 1550

Code	Fiber Type
1	250 μ m fiber
2	900 μ m fiber

Code	Package
0	Standard
1	Miniature

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Code	Connector ^{1,2}
0	No connector
1	FC/SPC
2	FC/APC
3	SC/SPC
4	SC/APC
5	ST
6	LC/SPC

1. Connectors available only with 900 μ m fiber option.
2. Other connectors available upon request.