JDS Uniphase

Product Bulletin

1536/1554 nm 3-Port Bandpass Wavelength Division Multiplexers

The JDS Uniphase three-port, two-channel bandpass wavelength division multiplexers use interference filter technology to separate and multiplex optical transmission signals. Highly stable and reliable, these WDMs have low loss and are available in standard and high isolation models. These components are ideal for WDM applications.

Key Features

- Wide bandwidth
- High channel isolation
- Low insertion loss
- Low polarization sensitivity
- Stable and reliable

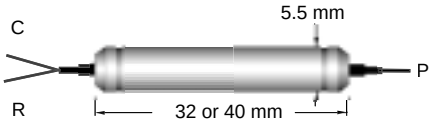
Applications

- Red and blue band separators
- Erbium doped fiber amplifiers (EDFAs)

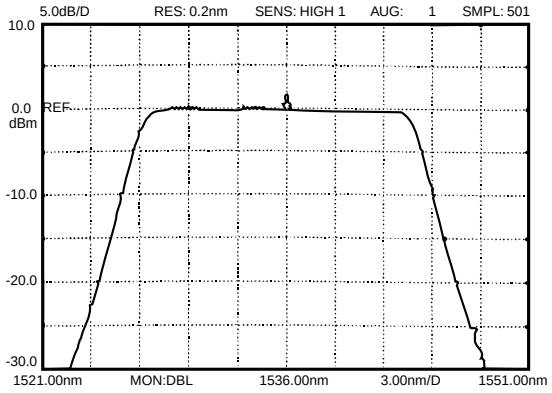
Compliance

- Telcordia 1209 and 1221

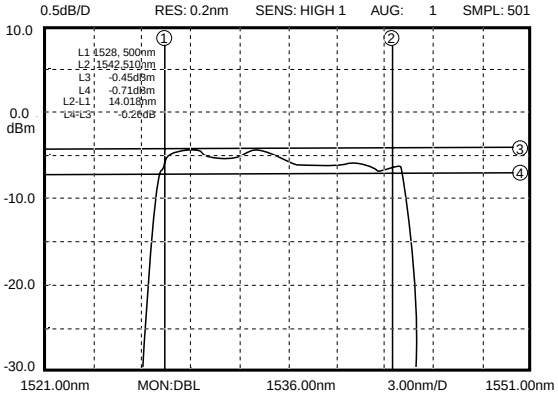
Package Dimensions



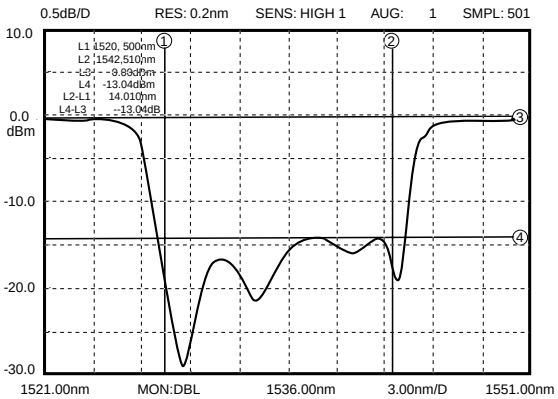
Pass Channel Spectrum



Pass Channel Spectrum



Reflection Channel Spectrum



Specifications

Parameter		Standard	Standard	High Isolation	High Isolation
Pass port (C↔P) center wavelength λ_C		1535.85 nm	1554.16 nm	1535.85 nm	1554.16 nm
Pass port (C↔P) wavelength range λ_P		1529.30 to 1542.39 nm	1547.46 to 1560.86 nm	1529.30 to 1542.39 nm	1547.46 to 1560.86 nm
Pass port (C↔P) insertion loss	Typ.	0.6 dB	0.6 dB	1.2 dB	1.2 dB
	Max.	0.9 dB	0.9 dB	1.5 dB	1.5 dB
Pass port (C↔P) flatness	Typ.	0.2 dB	0.2 dB	0.4 dB	0.4 dB
	Max.	0.3 dB	0.3 dB	0.6 dB	0.6 dB
Pass port (C↔P) isolation at λ_R	Min.	20 dB	20 dB	40 dB	40 dB
Reflect port (C↔R) wavelength range λ_R		1547.46 to 1560.86 nm	1529.30 to 1542.39 nm	1547.46 to 1560.86 nm	1529.30 to 1542.39 nm
Reflect port (C↔R) insertion loss	Typ.	0.3 dB	0.3 dB	0.3 dB	0.3 dB
	Max.	0.5 dB	0.5 dB	0.5 dB	0.5 dB
Reflect port (C↔R) flatness	Max.	0.1 dB	0.1 dB	0.1 dB	0.1 dB
Reflect port (C↔R) isolation at λ_P	Min.	12 dB	12 dB	12 dB	12 dB
Directivity	Min.	55 dB	55 dB	55 dB	55 dB
Optical return loss	Min.	50 dB	50 dB	50 dB	50 dB
Polarization dependent loss	Max.	0.1 dB	0.1 dB	0.1 dB	0.1 dB
Polarization mode dispersion	Max.	0.1 ps	0.1 ps	0.1 ps	0.1 ps
Thermal wavelength drift	Max.	0.004 nm/°C	0.004 nm/°C	0.004 nm/°C	0.004 nm/°C
Thermal stability	Max.	0.005 dB/°C	0.005 dB/°C	0.005 dB/°C	0.005 dB/°C
Optical power	Max.	250 mW	250 mW	250 mW	250 mW
Tensile load	Max.	5 N	5 N	5 N	5 N
Operating temperature		0 to 70 °C	0 to 70 °C	0 to 70 °C	0 to 70 °C
Storage temperature		-40 to 85 °C	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C

Ordering Information

Indicate your requirements by selecting one option from each configuration table. Please print the corresponding codes in the available boxes to form your part number. For more information on this or other products and their availability, please contact your JDS Uniphase account manager, or call 1-877-550-JDSU toll free in the U.S. and Canada, or visit www.jdsuniphase.com.

Sample: BWDM360S31010

BWDM □ □ 0 □ 3 □ 0 □ □

Code	Wavelength
36	Pass 1536/reflect 1554
54	Pass 1554/reflect 1536

Code	Isolation
S	Standard
H	High isolation

Code	Package
1	5.5 (D) x 32 (L) mm Corning SMF-28 (250 µm fiber)[1]
3	5.5 (D) x 40 (L) mm Corning SMF-28 (900 µm loose tube)

Code	Fiber Length
1	1 meter[1]
2	2 meters
3	3 meters
4	0.5 meters
5	1.5 meters
6	2.5 meters

Code	Connector[2]
0	No connector[1]
1	FC/PC
2	FC/SPC
3	FC/APC
4	SC/SPC
5	SC/APC
7	D4
8	ST
9	FC/UPC
A	SC/UPC

1. Standard.
2. Insertion loss and return loss depend on connector type.

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