

WDM Filter, 100 GHz Extrawide Passband, Low CD for 40 Gbps Applications

DWS Series



Key Features

- Lowest chromatic dispersion
- Exceptional reliability and environmental stability
- Low insertion loss
- Flat and extrawide passband
- High demux channel isolation

Applications

- Metro networks
- Long-haul networks
- Denser channel plans
- 40 Gbps application

Compliance

- Telcordia GR-1221

JDSU ITU components are the result of years of telecommunication experience in interference filter technology. Individual components are available on ITU channel spacings of 200 and 100 GHz, as well as on bands of ITU channels.

JDSU ITU components are the evolution of industry-standard 100 GHz ITU components. Manufactured using laser welding technology, these devices exceed Telcordia GR-1221 requirements. They are designed for the lowest chromatic dispersion and demonstrate low insertion loss, temperature insensitivity, and reliable performance in any system application.

Used within mux/demux and add/drop applications, JDSU ITU components provide the utmost flexibility in single ITU channel management. They offer a simple solution to wavelength routing and are optimized to supply maximum bandwidth and isolation, yet maintain very low chromatic dispersion.

Established volume capability and proven experience in customizing fiber optic components and modules make JDSU the supplier of choice.

Specifications

Parameter		DWS-1Fxxx3Lxx	DWS-1Fxxx3Lxx-WB
Passband width	Minimum	±14.1 GHz (≈ ±0.115 nm)	±17.5 GHz (±0.14 nm)
Transmission passband ripple	Maximum	0.3 dB	0.3 dB
Reflection passband ripple	Maximum	0.2 dB	0.3 dB
Transmission insertion loss ¹	Maximum	1.1 dB	1.1 dB
Reflection insertion loss ¹	Maximum	0.45 dB	0.55 dB
Transmission isolation (adjacent channel)	Minimum	25 dB	23 dB
Transmission isolation (non-adjacent channel)	Minimum	50 dB	50 dB
Reflection isolation	Minimum	16 dB	15 dB
Transmission chromatic dispersion	Maximum	±17 ps/nm	±17 ps/nm
Reflection chromatic dispersion	Maximum	±17 ps/nm	±20 ps/nm
Optical return loss	Minimum	45 dB	45 dB
Directivity	Minimum	50 dB	50 dB
Polarization dependent loss	Maximum	0.1 dB	0.1 dB
Polarization mode dispersion	Maximum	0.1 ps	0.16 ps
Optical power handling	Maximum	1 W	
Operating temperature range		-5 to 75°C	
Storage temperature range		-40 to 85°C	
Fiber type		9/125/250 μm fiber, 9/125/900 μm fiber	
Fiber length		1.5±0.1m	
Package dimensions (Ø x L)			
9/125/250 μm fiber		5.5x35.4 mm (excluding strain reliefs)	
9/125/900 μm fiber		5.5x42.9 mm	

1. Excludes connector insertion loss

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: DWS-1F3683L20-WB

DWS-1F  3L 

Channel Frequency
Provided by JDSU upon
customer confirmation

Code	Fiber Type
2	250 μm fiber ¹
9	900 μm fiber

Code	Connector Type ²
0	No connector
2	FC/SPC
3	FC/APC
4	SC/SPC
5	SC/APC
6	LC/UPC



Code	Passband Width
None	±14.1 GHz (≈ ±0.115 nm)
WB	±17.5 GHz (±0.14 nm)

1. No connector available with this option.
2. Other connectors available upon request.