

# Multi-Channel Mux/Demux Module 200 GHz Spacing



#### **Key Features**

- Low insertion loss
- Exceptional reliability and environmental stability
- Low polarization dependent loss (PDL)
- Flat and wide passband
- High demux channel isolation
- Customizable with tap and multi-channel or band capabilities

#### **Applications**

- Access/enterprise networks
- Metro networks
- Long haul networks
- Denser channel plans (50 GHz when used in conjunction with an optical frequency interleaver)
- Test bench/systems

## Compliance

• Telcordia GR-1221

JDSU multi-channel multiplexer/demultiplexer (mux/demux) modules are available on ITU channel spacings of 200, 100, and 50 GHz, as well as on bands of ITU channels.

Manufactured using laser welding technology, the integrated mux/demux module components exceed Telcordia GR-1221 requirements. The modules, themselves, demonstrate low loss, temperature insensitivity, and reliable performance in any system application.

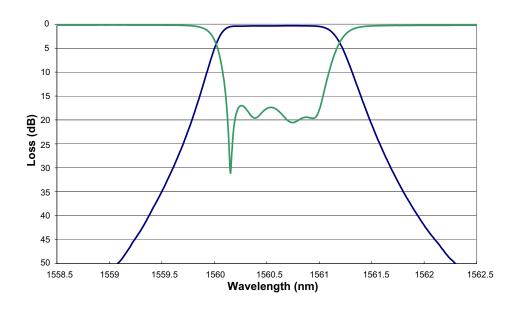
Fixed mux/demux modules offer low-cost wavelength management solutions that are suitable for long haul, metro, and access applications. Easily customizable, these devices are configured by number of channels for any customer-specific channel plan.

Packaging options include fiber type, connectors, footprint, and integration of taps and detectors for a complete dense wavelength division multiplexing (DWDM) solution.

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

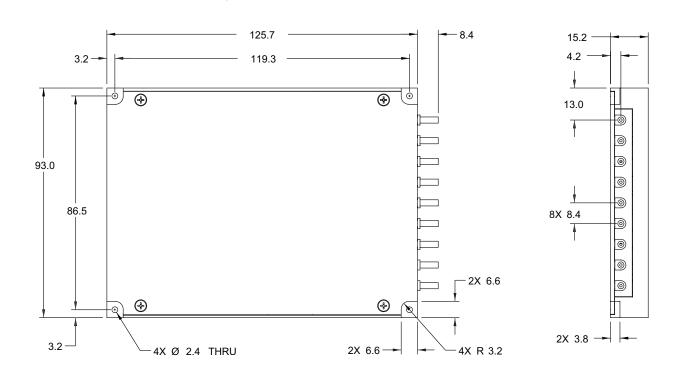
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### 200 GHz Coupler Spectral Plot



### **Dimensions Diagram**

(Specifications in mm unless otherwise noted.)



Specifications				
Parameter		4 Ch	8 Ch	16 Ch
Wavelength range		C or L bar	nd ITU channels 186.6 to 196.	1 THz
Passband	Minimum	±33 GHz (≈ ± 0.26 nm)		
Passband ripple	Maximum	0.5 dB	0.35 dB	0.35 dB
Insertion loss <sup>1,2</sup>	Maximum	2.0 dB	3.2 dB	4.0 dB
Isolation (adjacent channel) <sup>3</sup>	Minimum	30 dB	30 dB	30 dB
Isolation (non-adjacent channel) <sup>3</sup>	Minimum	50 dB	50 dB	50 dB
Return loss	Minimum	45 dB	45 dB	45 dB
Directivity	Minimum	50 dB	50 dB	50 dB
Polarization dependent loss	Maximum	0.2 dB	0.2 dB	0.2 dB
Polarization mode dispersion	Maximum	0.15 ps	0.15 ps	0.15 ps
Optical power handling	Maximum	1 W	1 W	1 W
Operating temperature range		0 to 70 °C		
Storage temperature range		-40 to 85 °C		
Fiber type		9/125/900 μm fiber		
Pigtail length			$1.0 \pm 0.1 \text{ m}$	
Package size (L x W x H)		125.7 x 93.0 x 9.9 mm	125.7 x 93.0 x 9.9 mm	125.7 x 93.0 x 15.2 mm

<sup>1.</sup> Losses include one connector.

 $<sup>2. \</sup> Losses \ are \ for \ demultiplexers; \ multiplexer \ losses \ are \ 0.3 \ dB \ lower \ (i.e. \ 4 \ Ch \ Mux \ loss \ is \ 2.3 \ dB). \ If \ no \ connector \ option \ is selected, the \ maximum \ loss \ should \ be \ 0.2 \ dB \ lower.$ 

 $<sup>3.\,</sup>$  Isolation values stated are for demultiplexers only.

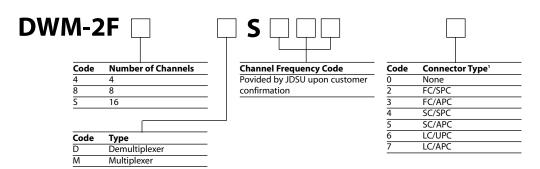


# MULTI-CHANNEL MUX/DEMUX MODULE 200 GHZ SPACING

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: DWM-2F4DS2724



1. Other connectors available upon request.

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