

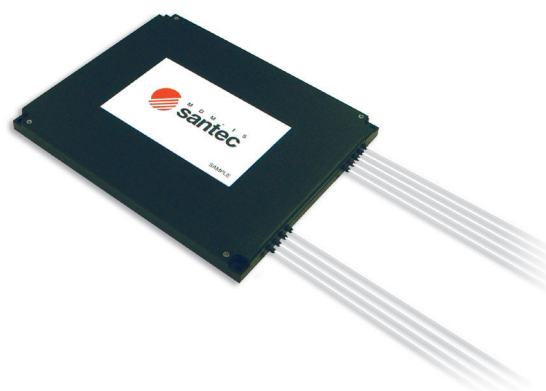


4 Channel Mux/ DeMux Module

MDM-15

Product Overview

The MDM-15 is multi-channel WDM Multiplexer or Demultiplexer based on dielectric thin-film filter technology. The module is designed to add or drop 4 channels with ITU grid spacing of 100, 200 or 400 GHz. Channels can be dropped with high adjacent channel isolation and all channels are subject to low insertion loss. The MDM-15 can also be configured with an additional band splitting filter to enable device cascading in DWDM systems.



Features

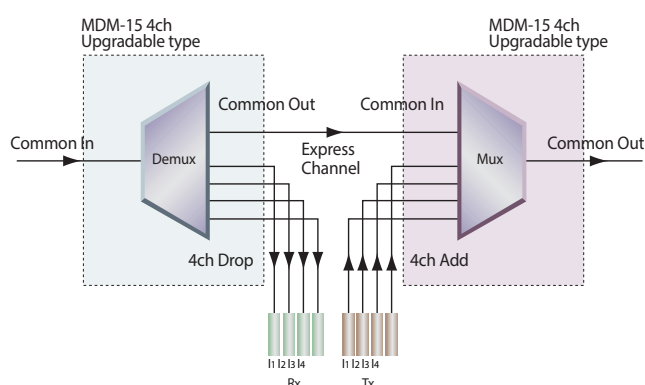
- Low loss, low PDL
- High channel isolation
- Upgradable configuration suitable for scalable system
- Telcordia GR-1221 qualified
- RoHS compliant



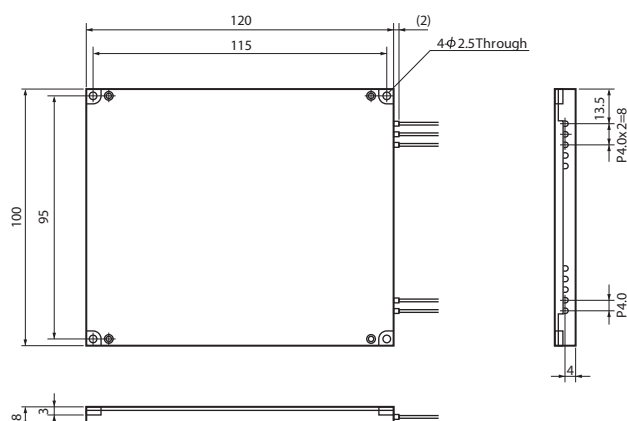
Applications

- Wavelength Mux / Demux
- Optical Add Drop Multiplexer (OADM)
- Access / Ring network system

Configuration



Dimensions Unit [mm]



Model Variations

Each type of filter has optimized performance (passband and isolation), designed specifically for adding or dropping channels in 100 , 200 and 400 GHz spaced system.

The center wavelength can be selected from any standard ITU grid wavelengths.

100 GHz 4 Channel Mux / DeMux Module

Parameter	Unit	Mux	DeMux
Wavelength Range	nm	1520-1610	
Channel Spacing	GHz	100	
Number of Channels	dB	4	
Passband	nm	0.11	
Flatness	dB	≤ 0.5	
Insertion Loss	dB	≤ 1.6	≤ 1.9
Adjacent Isolation	dB	≥ 12	≥ 25
Non -Adjacent Isolation	dB	-	≥ 40
Directivity	dB	≥ 45	≥ 55
Return Loss	dB	≥ 45	
Polarization Dependent Loss (PDL)	dB	≤ 0.2	
Polarization Mode Dispersion (PMD)	ps	≤ 0.1	
Max Optical Power	dBm	≤ 23	
Operating Temperature	°C	-5 to +70	
Storage Temperature	°C	-40 to +85	

200 GHz 4 Channel Mux / DeMux Module

Parameter	Unit	Mux	DeMux
Wavelength Range	nm	1520-1610	
Channel Spacing	GHz	200	
Number of Channels	dB	4	
Passband	nm	0.20	
Flatness	dB	≤ 0.5	
Insertion Loss	dB	≤ 1.6	≤ 1.9
Adjacent Isolation	dB	≥ 13	≥ 25
Non -Adjacent Isolation	dB	-	≥ 40
Directivity	dB	≥ 45	
Return Loss	dB	≥ 45	
Polarization Dependent Loss (PDL)	dB	≤ 0.2	
Polarization Mode Dispersion (PMD)	ps	≤ 0.1	
Max Optical Power	dBm	≤ 23	
Operating Temperature	°C	-5 to +70	
Storage Temperature	°C	-40 to +85	

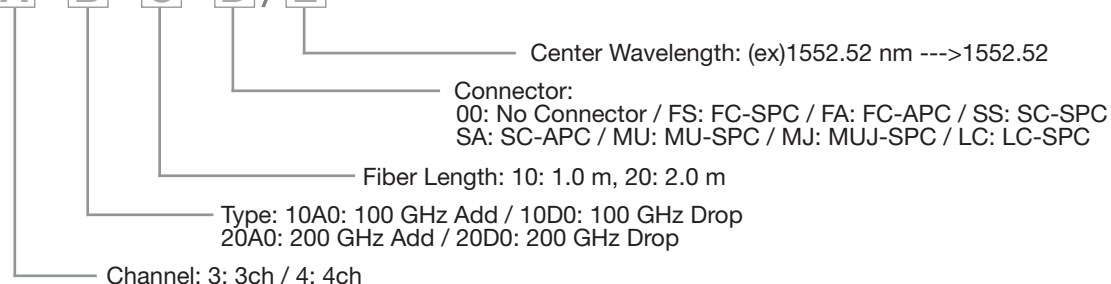
*1 All parameters are specified over operating temperature range.

*2 Insertion loss per filter includes Ripple and PDL, without connectors.

*3 Please contact Santec to discuss specific performance requirements.

Ordering Code

MDM-15 - A - B - C - D / E



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