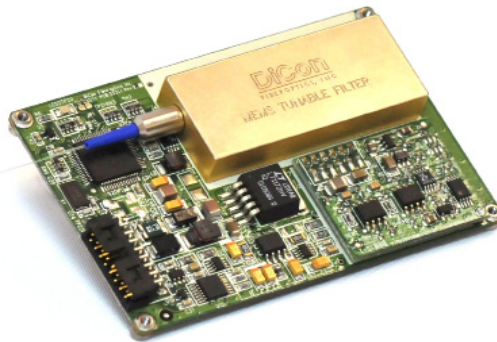


MEMS TUNABLE FILTER

DiCon's MEMS Tunable Filter is a compact 2-port device based on DiCon's proprietary MEMS technology. It de-multiplexes the incoming multi-wavelength signal and selects the desired wavelength channel using a tilting MEMS mirror as the tuning mechanism. The optical design is an extension of DiCon's proven MEMS switch design, and therefore offers the same durability, reliability, and stability. DiCon's MEMS Tunable Filter is an ideal component for use in all wavelength selection and monitoring applications, and is particularly well-suited for applications requiring frequent or continuous tuning.



FEATURES

- Excellent MEMS durability, thermal stability, and repeatability
- Superior optical performance
- Compact form factor
- Gaussian-shaped passband
- Passband optimized for 100 GHz channel spacing
- Customized passbands and tuning ranges available
- I2C and RS232 control interface included

APPLICATIONS

- Optical Channel Performance Monitoring
- ROADM
- Noise Suppression
- Signal Tracking



MEMS TUNABLE FILTER

OPTICAL SPECIFICATIONS

PARAMETER		RATING
Tuning Range	O-Band (13E1)	1260 to 1340 nm
	O-Band (13E3)	1280 to 1360 nm
	C&L-Band	1529 to 1610 nm
Min IL @ Peak ¹	< 4.5 dB	
Bandwidth @ 3 dB	> 0.32 nm	
Bandwidth @ 20 dB	< 1.90 nm	
Back Reflection	> 35 dB	
PDL	< 0.4 dB	
λ Setting Error	< +/- 50 pm	
Tuning Resolution	10 pm	
Tuning Speed	< 30 ms	
Optical Power	< 500 mW	
Durability	> 1 billion cycles	
Operating Temp	-5 to 70 °C	
Storage Temp	-40 to 85 °C	
Fiber Type	9/125 μ m single mode	

1. IL measured at 25 °C. IL < 5.0 dB over entire operating temperature range.

ORDERING INFORMATION

MTF800A - 0.32 - - 9 - 2B - -

Bandwidth @ 3 dB

0.32 0.32 nm min

Tuning Range

13E1 1260-1340 nm
13E3 1280-1360 nm
15/16 1529-1610 nm

Custom Tuning Range Available Upon Request

Fiber Type

9 9/125 μ m single mode fiber

Jacket Type

2B 250 μ m barefiber

Connector Type

FC FC/SPC
FC/APC FC/APC
N NONE

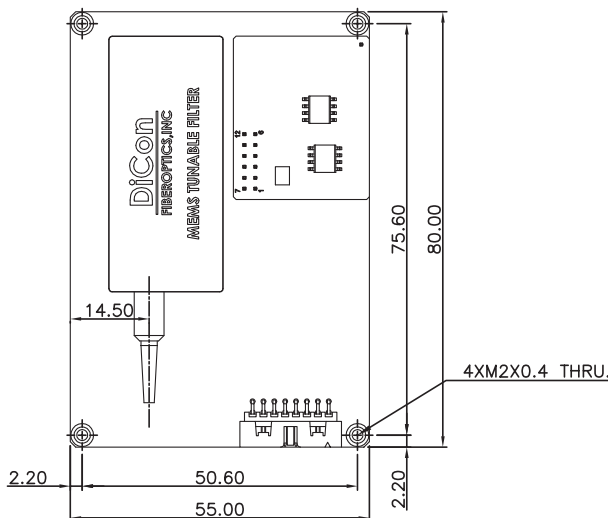
Also Available: SC, SC/UPC, SC/APC, ST, ST/UPC, LC

Pigtail Length

1 1 Meter
X Specify X Meters

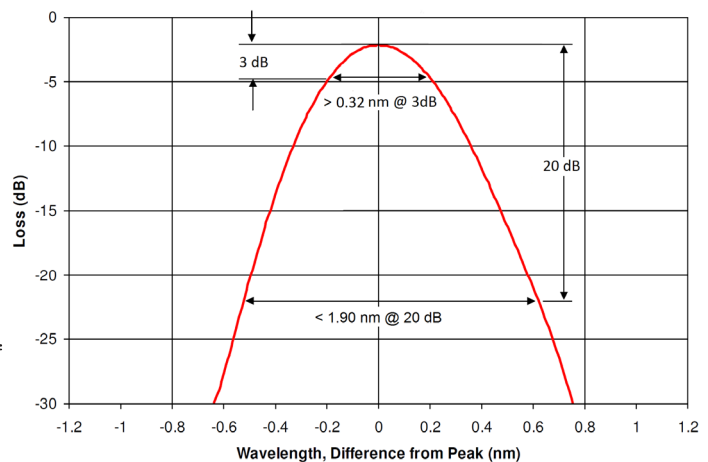
MECHANICAL DIMENSIONS

(Units: mm)



MOLEX:87833-1620
MATING PARTS:87568-1694
51110-1651

OPTICAL SPECTRUM



ELECTRICAL SPECIFICATIONS

PARAMETER	RATING
Latching Type	non-latching
Control Type	I ² C and RS232
Vcc Voltage	12 VDC
Power Consumption	1.6 W max.
Vcc Damage Threshold	15 VDC