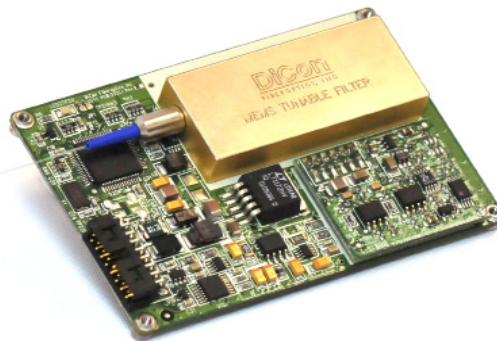


MEMS TUNABLE FILTER (TYPE B)

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 50 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 (TYPE B)

OPTICAL SPECIFICATIONS^{1,2}

PARAMETER	RATING
Insertion Loss @ Peak ^{3,4}	5.0 dB max.
Bandwidth @ 3 dB	0.15 nm min.
Bandwidth @ 20 dB	0.80 nm max.
Back Reflection	-35 dB max.
PDL	0.3 dB max.
λ Setting Error	+/- 50 pm max.
Tuning Resolution	10 pm
Tuning Speed	30 ms max.
Optical Power	500 mW max.
Durability	1 billion cycles min.
Operating Temp	-5 to 70 °C
Storage Temp	-40 to 85 °C
Fiber Type	9/125 μ m single mode

- Specifications are without connectors.
- Specifications are measured at room temp.
- IL is 5.0 dB max for operating temperature from 20°C to 45°C.
- IL is 6.0dB max over entire operating temperature range.

ORDERING INFORMATION

MTF500B - 0.15 - 15W - 9 - 2B - -

Bandwidth @ 3 dB

0.15 0.15 nm min

Tuning Range

15W 1527.21-1568.78 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

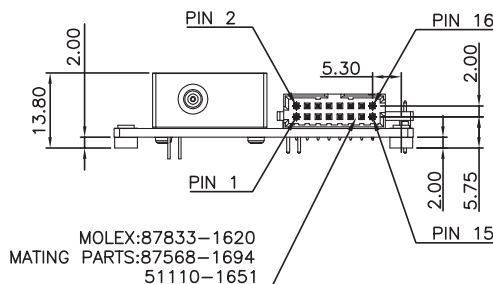
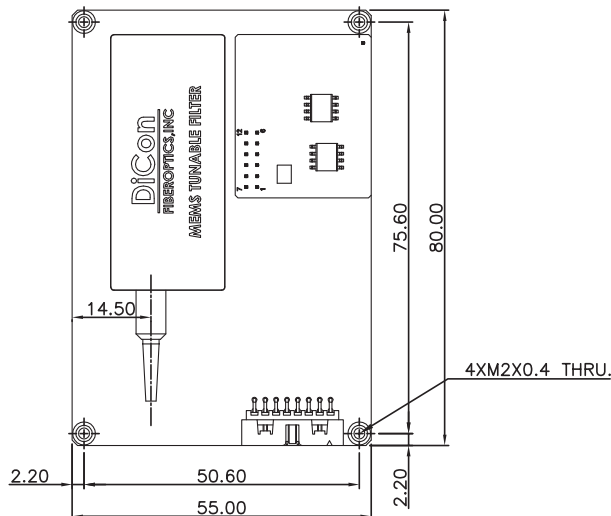
Also Available: SC, SC/UPC, SC/APC, ST, ST/UPC, LC

Pigtail Length

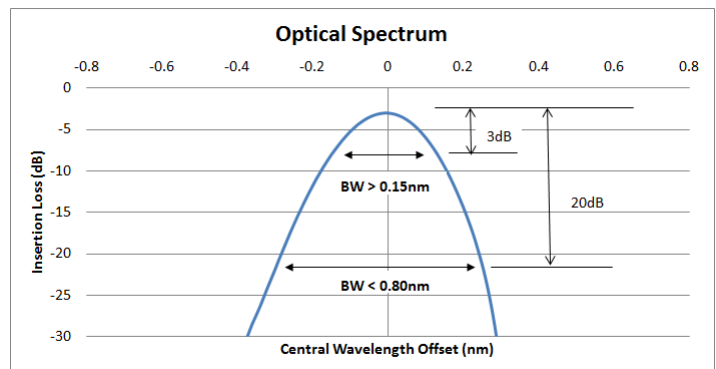
1 1 Meter
X Specify X Meters

MECHANICAL DIMENSIONS

(Units: mm)



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