

Bandpass Cavity Filter Operating at 4 GHz with a 25 MHz Passband Bandwidth with SMA Female Connectors



FMFL1021

Features

- Passband Bandwidth of 25 MHz
- High Rejection
- Cavity filter design
- Min rejection 70 dB at 0.5 GHz to 3.5 GHz
- Min rejection 70 dB at 4.5 GHz to 11 GHz
- Maximum insertion loss of 1.5 dB
- Female SMA connectors
- Very high Q factor and high selectivity

Applications

- Test and Measurement
- Lab Instrumentation
- Antenna Systems

Description

The FMFL1021 is a four section band pass filter that is used for filtering for test and measurement, lab instrumentation, and antenna systems uses. The passband bandwidth is 25 MHz. Implementing a cavity design, the filter has excellent rejection of 70 dB at 3.5 GHz and 4.5 GHz. It has a maximum insertion loss of 1.5 dB. The FMFL1021 has SMA female connectors.

Electrical Specifications

Description	Min	Typ	Max	Units
Passband Center Frequency		4		GHz
Impedance		50		Ohms
Insertion Loss		1	1.5	dB
Passband VSWR		1.2:1	1.3:1	
Rejection at 3.5 GHz	70	80		dB
Rejection at 4.5 GHz	70	80		dB
Input Power, CW			50	Watts
Input Power, Peak			200	Watts

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Size

Length	2.29 in [58.17 mm]
Width	0.47 in [11.94 mm]
Height	1.14 in [28.96 mm]
Weight	0.125 lbs [56.7 g]
Body Material and Plating	Aluminum
Finish	Grey Paint

Configuration

Number of Sections	4
Connector 1	SMA Female
Connector 2	SMA Female

Bandpass Cavity Filter Operating at 4 GHz with a 25 MHz Passband Bandwidth with SMA Female Connectors



FMFL1021

Environmental Specifications

Temperature

Operating Range
Storage Range

-20 to +60 deg C
-40 to +85 deg C

Environment

Humidity
Shock
Vibration
Altitude

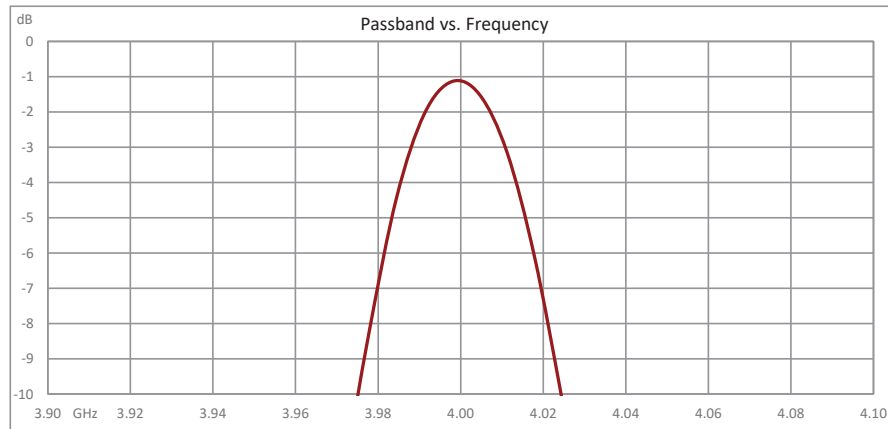
100% RH at 35°C, 95% RH at 40°C
20G for 11msec half sine wave, 3 axis both directions
25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
30,000 ft. (Epoxy Sealed Controlled Environment)

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:
Values at 25°C, sea level.

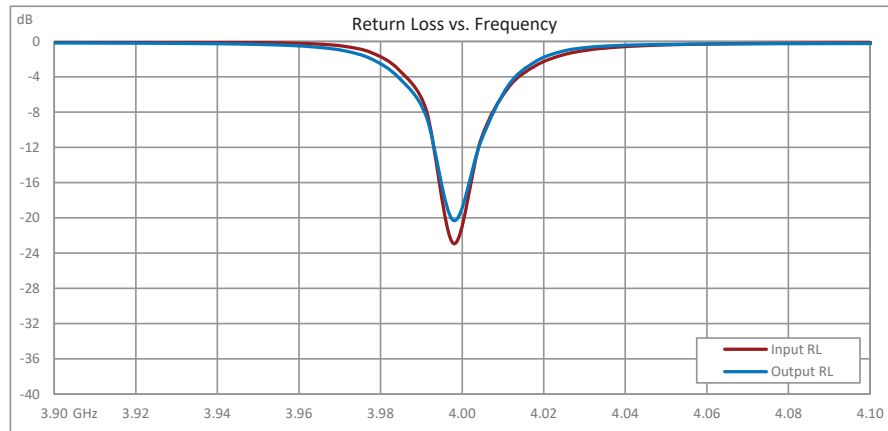
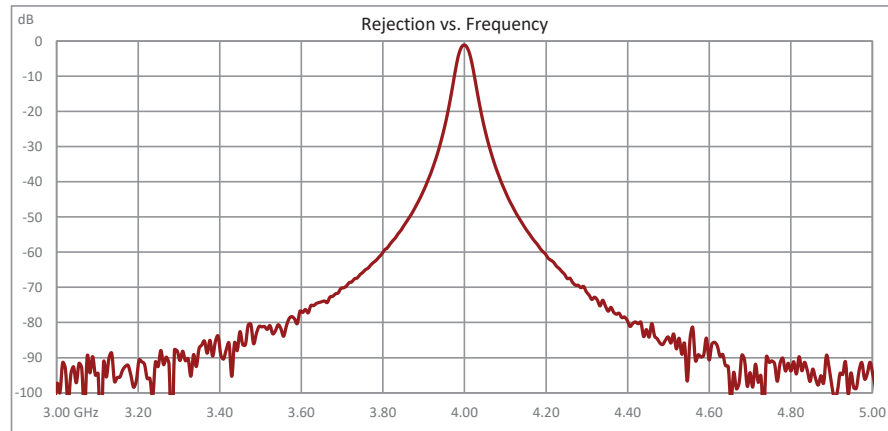
Typical Performance Data



Bandpass Cavity Filter Operating at 4 GHz with a 25 MHz Passband Bandwidth with SMA Female Connectors



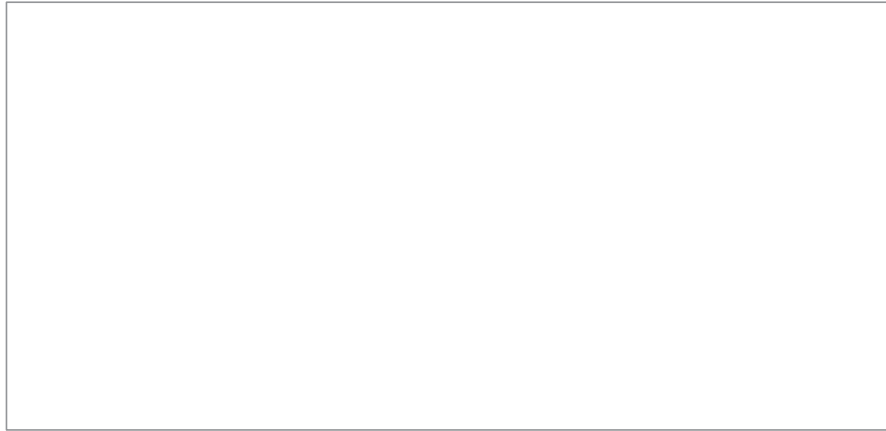
FMFL1021



Bandpass Cavity Filter Operating at 4 GHz with a 25 MHz Passband Bandwidth with SMA Female Connectors



FMFL1021



Bandpass Cavity Filter Operating at 4 GHz with a 25 MHz Passband Bandwidth with SMA Female Connectors from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Bandpass Cavity Filter Operating at 4 GHz with a 25 MHz Passband Bandwidth with SMA Female Connectors FMFL1021](https://www.fairviewmicrowave.com/bandpass-cavity-filter-4-ghz-sma-female-connectors-fmfl1021-p.aspx)

URL: <https://www.fairviewmicrowave.com/bandpass-cavity-filter-4-ghz-sma-female-connectors-fmfl1021-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

FMFL1021 CAD Drawing

Bandpass Cavity Filter Operating at 4 GHz with a 25 MHz Passband Bandwidth with SMA Female Connectors

