

## Bandpass Cavity Filter Operating at 5 GHz with a 40 MHz Passband Bandwidth with SMA Female Connectors



### FMFL1022

#### Features

- Passband Bandwidth of 40 MHz
- High Rejection
- Cavity filter design
- Min rejection 70 dB at 0.5 GHz to 4.5 GHz
- Min rejection 70 dB at 5.5 GHz to 11 GHz
- Maximum insertion loss of 1.8 dB
- Female SMA connectors
- Very high Q factor and high selectivity

#### Applications

- Test and Measurement
- Lab Instrumentation
- Antenna Systems

#### Description

The FMFL1022 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 40 MHz. Implementing a cavity design, the filter has excellent rejection of 70 dB at 4.5 GHz and 5.5 GHz. It has a maximum insertion loss of 1.8 dB. The FMFL1022 has SMA female connectors.

#### Electrical Specifications

Description	Min	Typ	Max	Units
Passband Center Frequency		5		GHz
Impedance		50		Ohms
Insertion Loss		1.1	1.8	dB
Passband VSWR		1.2:1	1.3:1	
Rejection at 4.5 GHz	70	80		dB
Rejection at 5.5 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	1.02 in [25.91 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

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**Environmental Specifications**

**Temperature**

Operating Range -20 to +60 deg C  
Storage Range -40 to +85 deg C

**Environment**

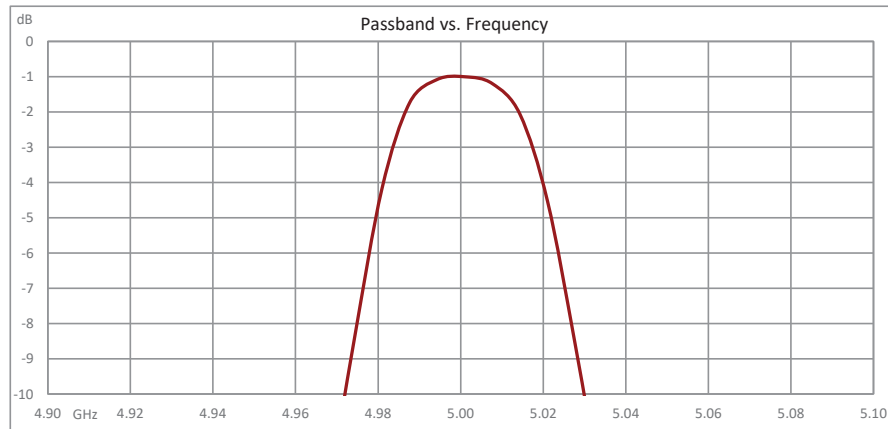
Humidity 100% RH at 35°C, 95% RH at 40°C  
Shock 20G for 11msec half sine wave, 3 axis both directions  
Vibration 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis  
Altitude 30,000 ft. (Epoxy Sealed Controlled Environment)

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

**Plotted and Other Data**

Notes:  
Values at 25°C, sea level.

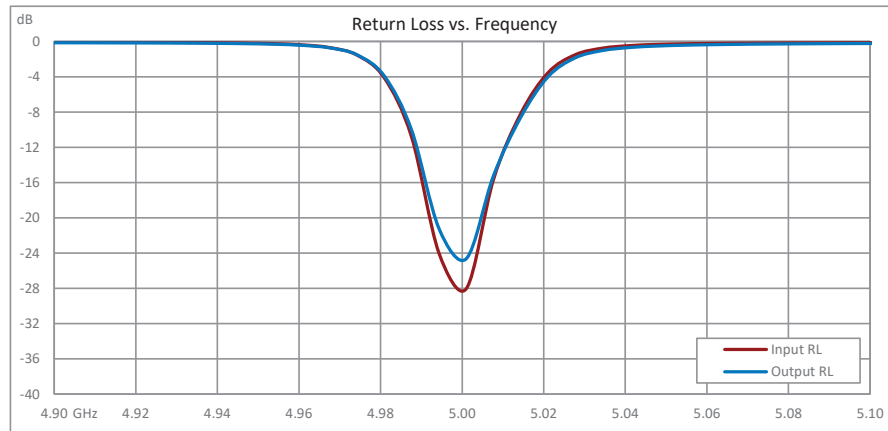
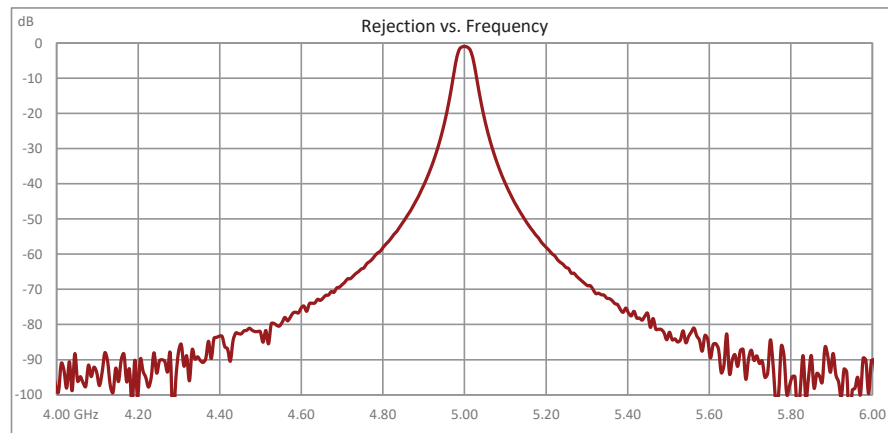
**Typical Performance Data**



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For additional information on this product, please click the following link: [Bandpass Cavity Filter Operating at 5 GHz with a 40 MHz Passband Bandwidth with SMA Female Connectors FMFL1022](https://www.fairviewmicrowave.com/bandpass-cavity-filter-5-ghz-sma-female-connectors-fmfl1022-p.aspx)

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# FMFL1022 CAD Drawing

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