

## Bandpass Cavity Filter Operating at 8 GHz with a 40 MHz Passband Bandwidth with SMA Female Connectors



### FMFL1024

#### Features

- Passband Bandwidth of 40 MHz
- High Rejection
- Cavity filter design
- Min rejection 70 dB at 0.5 GHz to 7.5 GHz
- Min rejection 70 dB at 8.5 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 FMFL1024 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 7.5 GHz and 8.5 GHz. It has a maximum insertion loss of 1.5 dB. The FMFL1024 has SMA female connectors.

#### Electrical Specifications

Description	Min	Typ	Max	Units
Passband Center Frequency		8		GHz
Impedance		50		Ohms
Insertion Loss		0.9	1.5	dB
Passband VSWR		1.2:1	1.3:1	
Rejection at 7.5 GHz	70	80		dB
Rejection at 8.5 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	0.83 in [21.08 mm]
Weight	0.1 lbs [45.36 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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**FMFL1024**

**Environmental Specifications**

**Temperature**

Operating Range -20 to +70 deg C  
Storage Range -40 to +85 deg C

**Environment**

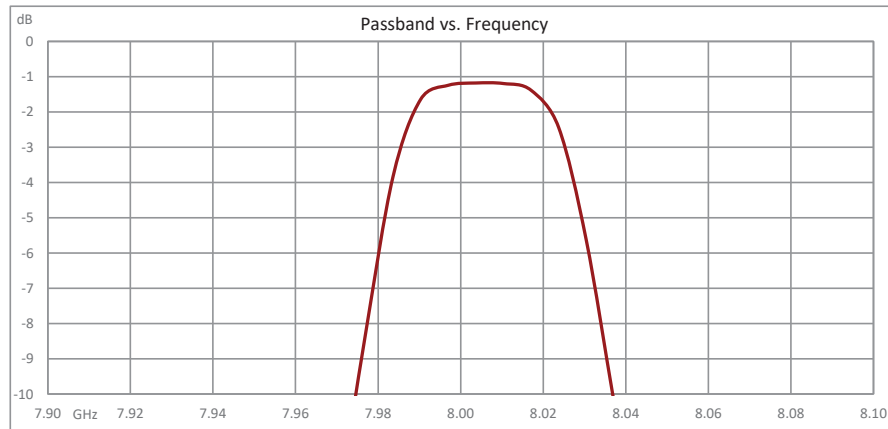
Humidity 100% RH at 35°C, 95% RH at 40°C  
Shock 20G for 11msec half sine wave, 3 axis both directions  
Vibration 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis  
Altitude 30,000 ft. (Epoxy Sealed Controlled Environment)

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

**Plotted and Other Data**

Notes:  
Values at 25°C, sea level.

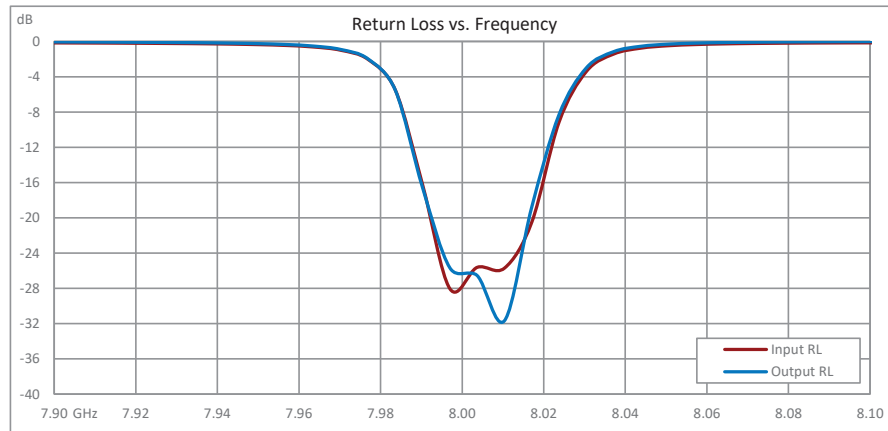
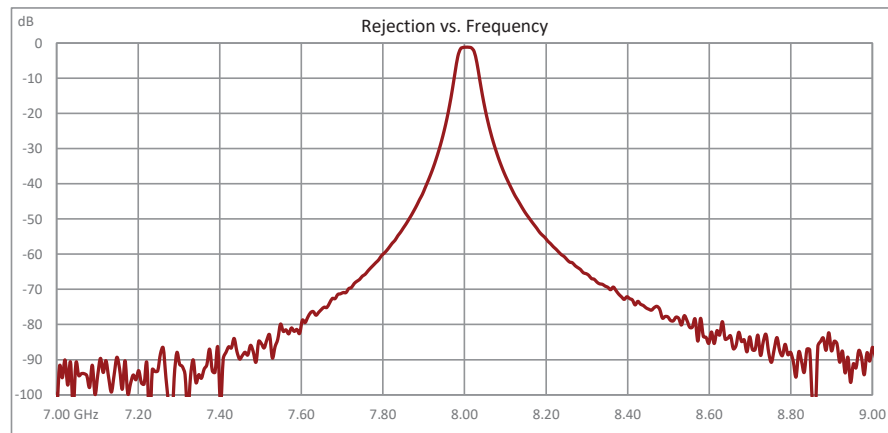
**Typical Performance Data**



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Bandpass Cavity Filter Operating at 8 GHz with a 40 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 8 GHz with a 40 MHz Passband Bandwidth with SMA Female Connectors FMFL1024](https://www.fairviewmicrowave.com/bandpass-cavity-filter-8-ghz-sma-female-connectors-fmfl1024-p.aspx)

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# FMFL1024 CAD Drawing

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