

Bandpass Cavity Filter Operating from 2.4 GHz to 2.484 GHz with a 165 MHz Passband Bandwidth with SMA Female Connectors



FMFL1020

Features

- Passband Bandwidth of 165 MHz
- High Rejection
- Cavity filter design
- Min rejection 50 dB at DC to 2.1 GHz
- Min rejection 50 dB at 2.8 GHz to 6 GHz
- Maximum insertion loss of 0.5 dB
- Female SMA connectors

Applications

- Test and Measurement
- Lab Instrumentation
- Antenna Systems

Description

The FMFL1020 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 165 MHz. Implementing a cavity design, the filter has excellent rejection of 50 dB at 2.1 GHz and 2.8 GHz. It has a maximum insertion loss of 0.5 dB. The FMFL1020 has SMA female connectors.

Electrical Specifications

Description	Min	Typ	Max	Units
Passband Frequency	2.4		2.484	GHz
Impedance		50		Ohms
Insertion Loss		0.3	0.5	dB
Passband VSWR		1.25:1	1.3:1	
Rejection at 2.1 GHz	50	54		dB
Rejection at 2.8 GHz	50	54		dB
Passband Ripple		0.15	0.3	dB
Input Power, CW			50	Watts
Input Power, Peak			500	Watts

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

Mechanical Specifications

Size

Length	2.44 in [61.98 mm]
Width	0.83 in [21.08 mm]
Height	2.44 in [61.98 mm]
Weight	0.34 lbs [154.22 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 -25 to +60 deg C
Storage Range -40 to +85 deg C

Environment

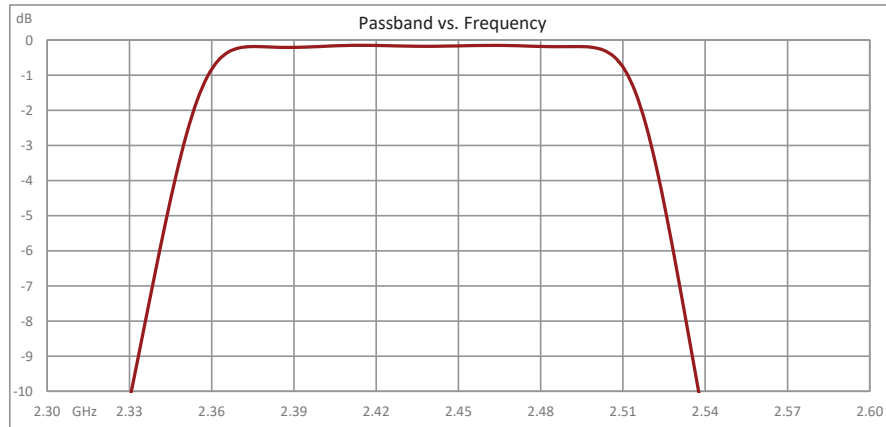
Humidity 100% RH at 35°C, 95% RH at 40°C
Shock 20G for 11msec half sine wave, 3 axis both directions
Vibration 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Altitude 30,000 ft. (Epoxy Sealed Controlled Environment)

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

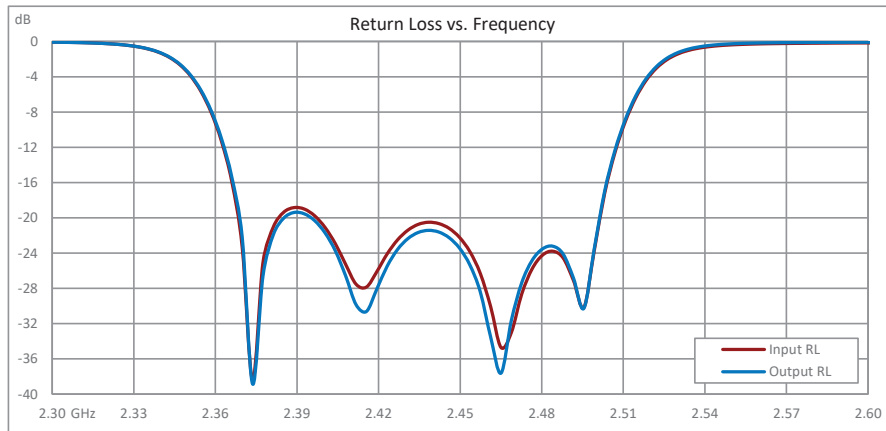
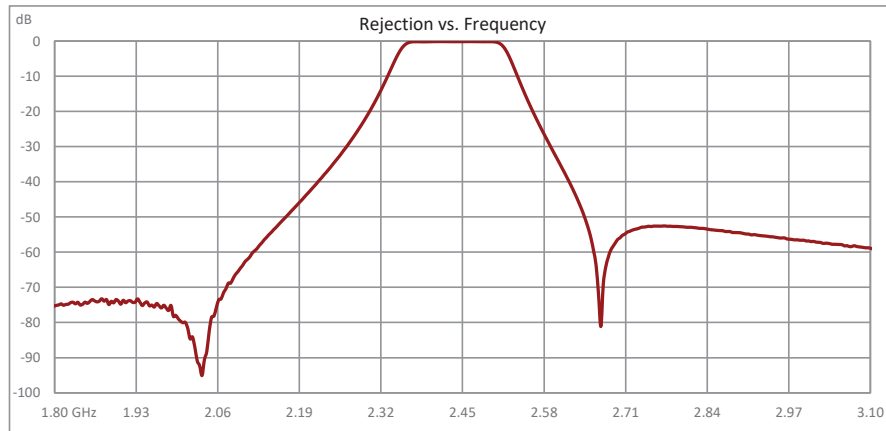
Typical Performance Data



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For additional information on this product, please click the following link: [Bandpass Cavity Filter Operating from 2.4 GHz to 2.484 GHz with a 165 MHz Passband Bandwidth with SMA Female Connectors FMFL1020](https://www.fairviewmicrowave.com/bandpass-cavity-filter-2.4-2.484-ghz-sma-female-connectors-fmfl1020-p.aspx)

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FMFL1020 CAD Drawing

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