

Bandpass Filter with Operating from 4.2 GHz to 5.7 GHz with a 2.2 GHz Passband Bandwidth with SMA Female Connectors



FMFL1031

Features

- Passband Bandwidth of 2.2 GHz
- High Rejection
- Cavity filter design
- Min rejection 45 dB at DC to 3.4 GHz
- Min rejection 45 dB at 6.9 GHz to 9.5 GHz
- Maximum insertion loss of 1 dB
- Female SMA connectors

Applications

- Test and Measurement
- Lab Instrumentation
- Antenna Systems

Description

The FMFL1031 is a ten section band pass filter that is used for filtering for test and measurement, lab instrumentation, and antenna systems uses. The passband bandwidth is 2.2 GHz. Implementing a cavity design, the filter has excellent rejection of 45 dB at 3.4 GHz and 6.9 GHz. It has a maximum insertion loss of 1 dB. The FMFL1031 has SMA female connectors.

Electrical Specifications

Description		Min	Typ	Max	Units
Passband Frequency		4.2		5.7	GHz
Impedance			50		Ohms
Insertion Loss			0.85	1	dB
Passband VSWR			1.5:1	1.8:1	
Rejection at	3.4 GHz	45	52		dB
Rejection at	6.9 GHz	45	60		dB
Passband Ripple			0.5	0.8	dB
Input Power, CW				15	Watts
Input Power, Peak	at 10% Duty Cycle 1μs Pulse Width			100	Watts

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

Mechanical Specifications

Size

Length	2.87 in [72.9 mm]
Width	0.47 in [11.94 mm]
Height	1.26 in [32 mm]
Weight	0.194 lbs [88 g]
Body Material and Plating	Aluminum
Finish	Grey Paint

Configuration

Number of Sections	10
Connector 1	SMA Female
Connector 2	SMA Female

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Environmental Specifications

Temperature

Operating Range
Storage Range

-55 to +85 deg C
-55 to +125 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)

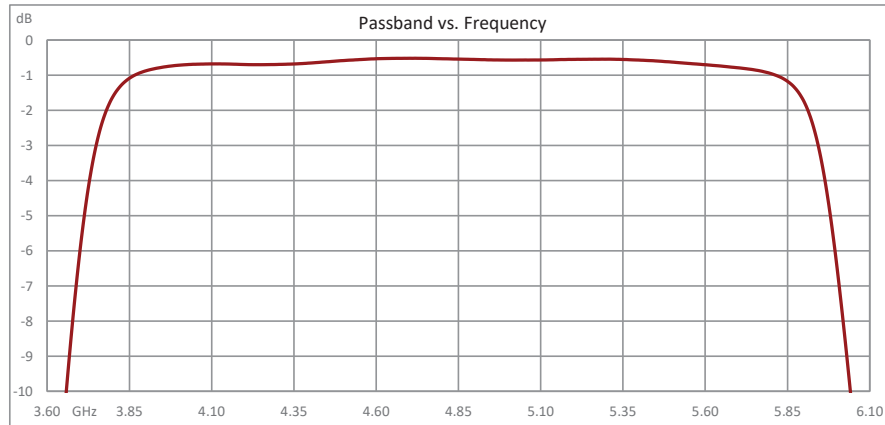
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

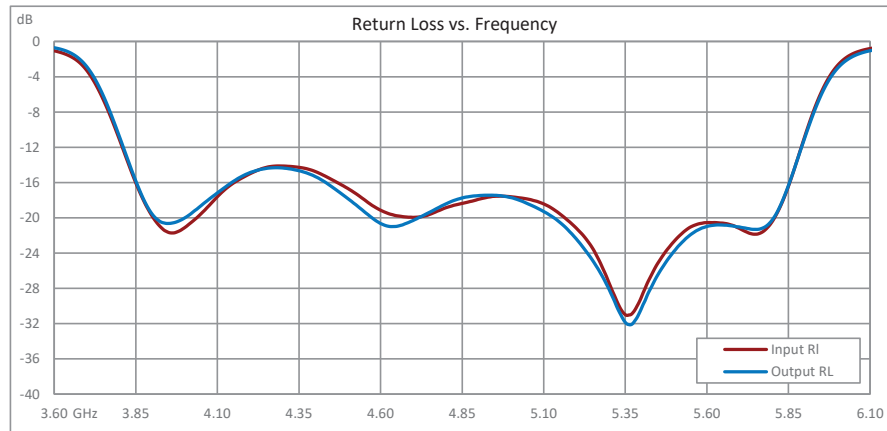
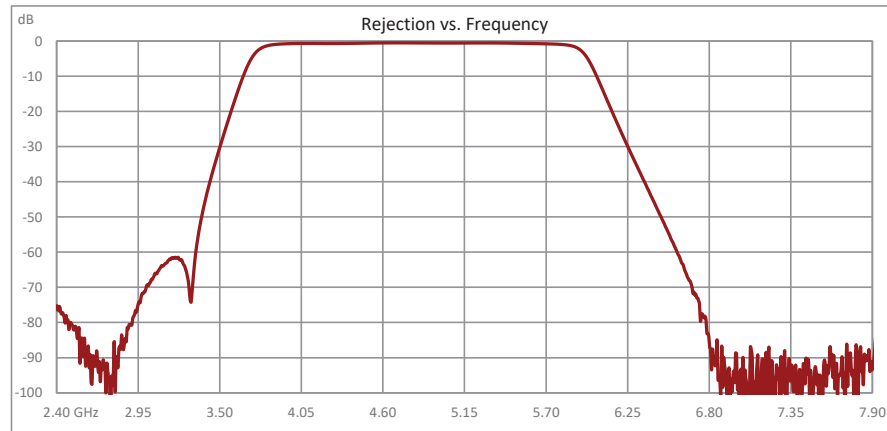
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Typical Performance Data



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For additional information on this product, please click the following link: [Bandpass Filter with Operating from 4.2 GHz to 5.7 GHz with a 2.2 GHz Passband Bandwidth with SMA Female Connectors FMFL1031](https://www.fairviewmicrowave.com/bandpass-cavity-filter-4.2-5.7-ghz-sma-female-connectors-fmfl1031-p.aspx)

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