

## Bandpass Cavity Filter Operating from 2.2 GHz to 2.5 GHz With SMA Female Connectors

The FMFL8701A is a eight section band pass filter that is used for filtering for ISM, WiFi, Bluetooth, and Zigbee uses. The pass band is 300 MHz, or 2.2 to 2.5 GHz. Implementing a combline design, the filter has excellent rejection of 60 dB at 2.7 GHz to 3.7 GHz, or about 200 MHz from the band edges. It has a maximum insertion loss of 0.8 dB. The FMFL8701A has SMA female connectors.



### Electrical Specifications

Description	Min	Typ	Max	Units
Passband Frequency	2.2		2.5	GHz
Impedance		50		Ohms
Insertion Loss		0.5	0.8	dB
Passband VSWR			1.43:1	
Rejection at 2.7 GHz	60			dB
Rejection at 4.4 GHz	40			dB
Input Power, CW			5	Watts

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

### Mechanical Specifications

#### Size

Length	2.5 in [63.5 mm]
Width	1.1 in [27.94 mm]
Height	0.53 in [13.46 mm]
Weight	0.175 lbs [79.38 g]

#### Configuration

Design	Comblin
Number of Sections	8
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

### Features:

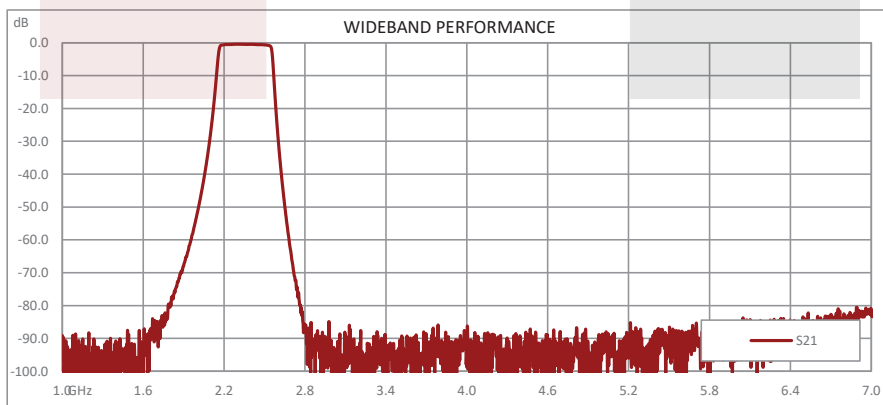
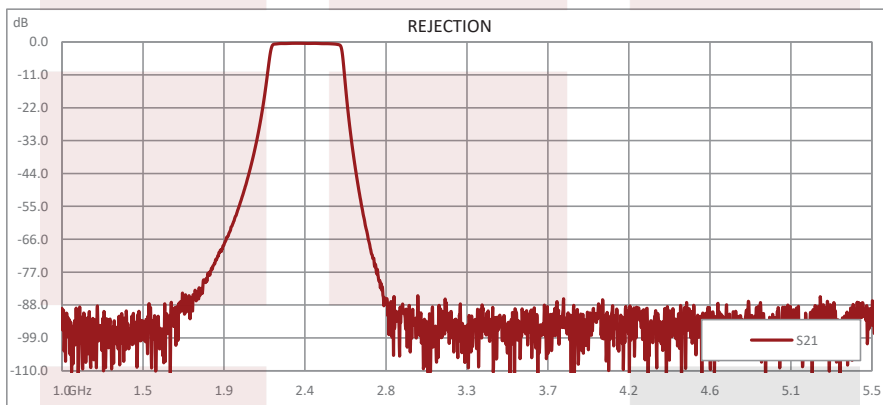
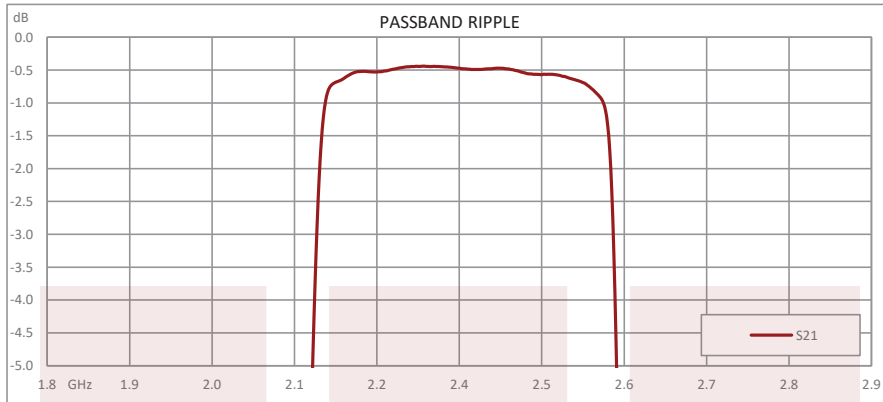
- Passband of 300 MHz
- 2.2 GHz to 2.5 GHz
- Eight section
- Comblin filter design
- Min rejection 60 dB at 2.7 GHz to 3.7 GHz
- Min rejection 40 dB at 4.4 GHz to 5.3 GHz
- Maximum insertion loss of 0.8 dB
- Female SMA connectors

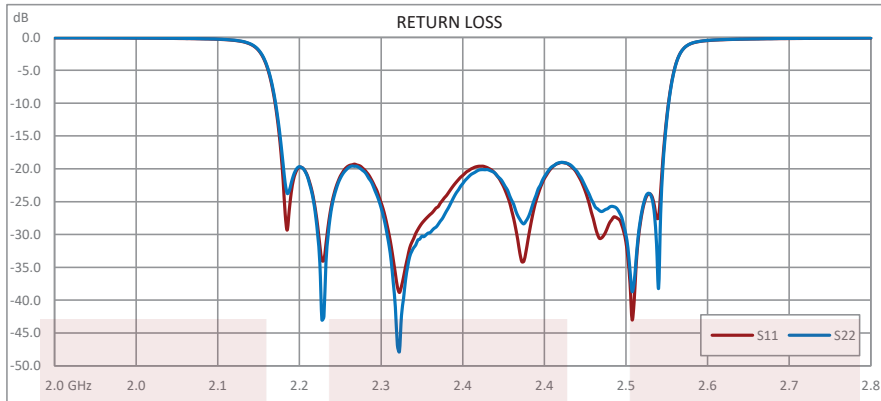
### Applications:

- Wifi Bands
- Cellular Bands
- Satellite Communications

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**Typical Performance Data**





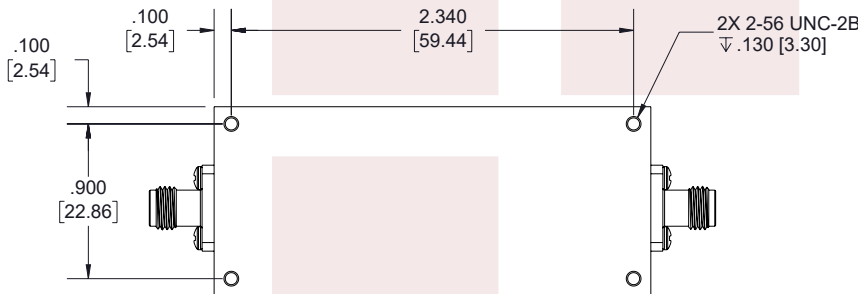
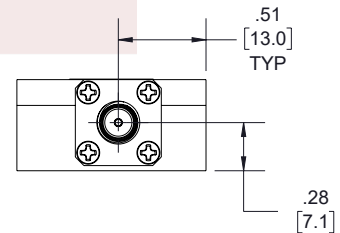
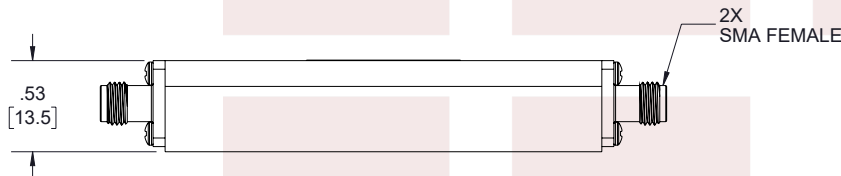
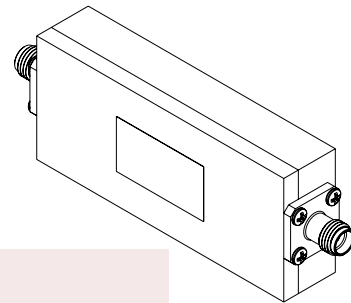
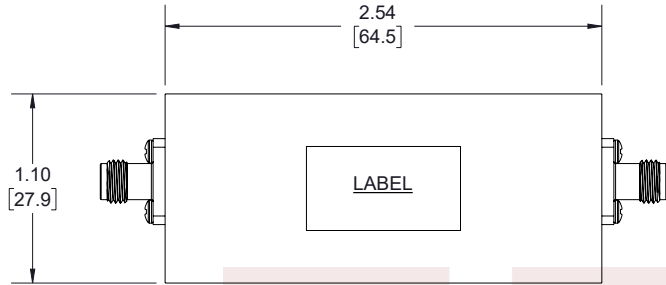
Bandpass Cavity Filter Operating from 2.2 GHz to 2.5 GHz With SMA Female Connectors from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Bandpass Cavity Filter Operating from 2.2 GHz to 2.5 GHz With SMA Female Connectors FMFL8701A](https://www.fairviewmicrowave.com/bandpass-cavity-filter-2.2-2.5-ghz-sma-female-connectors-fmfl8701a-p.aspx)

URL: <https://www.fairviewmicrowave.com/bandpass-cavity-filter-2.2-2.5-ghz-sma-female-connectors-fmfl8701a-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	10/21/2022	S. PONG



LABEL

P/N: 8701A  
2200-2500 MHz  
D/C: YYWW

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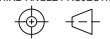
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Bandpass Cavity Filter Operating from 2.2 GHz to 2.5 GHz With SMA Female Connectors

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: FRACTIONS CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

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SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMFL8701A	REV A
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T-Rev.D