

**Bandpass Cavity Filter Operating From 10.7 GHz to 12.2 GHz With SMA Female Connectors**

The FMFL1003 is an six section band pass filter. It is part of a family of filters that is useful for satellite communications. The pass band is 1500 MHz wide, from 10.7 GHz to 12.2 GHz. Implemented using a Comblaine design, the filter has excellent rejection of 50 dB at 8.45 GHz and 14.45 GHz, or  $\pm 3$  GHz from mid band. It has a maximum insertion loss of 1 dB. The FMFL1003 has SMA female connectors.

**Electrical Specifications**

Description	Min	Typ	Max	Units
Passband Frequency	10.7		12.2	GHz
Impedance		50		Ohms
Insertion Loss			1	dB
Passband VSWR		1.4:1		
Rejection at 8.45 GHz	50			dB
Rejection at 14.45 GHz	50			dB
Input Power, CW			2	Watts

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

**Mechanical Specifications**

Size	
Length	1.44 in [36.58 mm]
Width	0.5 in [12.7 mm]
Height	0.47 in [11.94 mm]

**Configuration**

Design	Comblaine
Number of Sections	6
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female
Connector Option	Field Replaceable

**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

RoHS Compliant	Yes
REACH Compliant	06/14/2014

**Plotted and Other Data**

Notes:  
 • Values at 25°C, sea level.



**Features:**

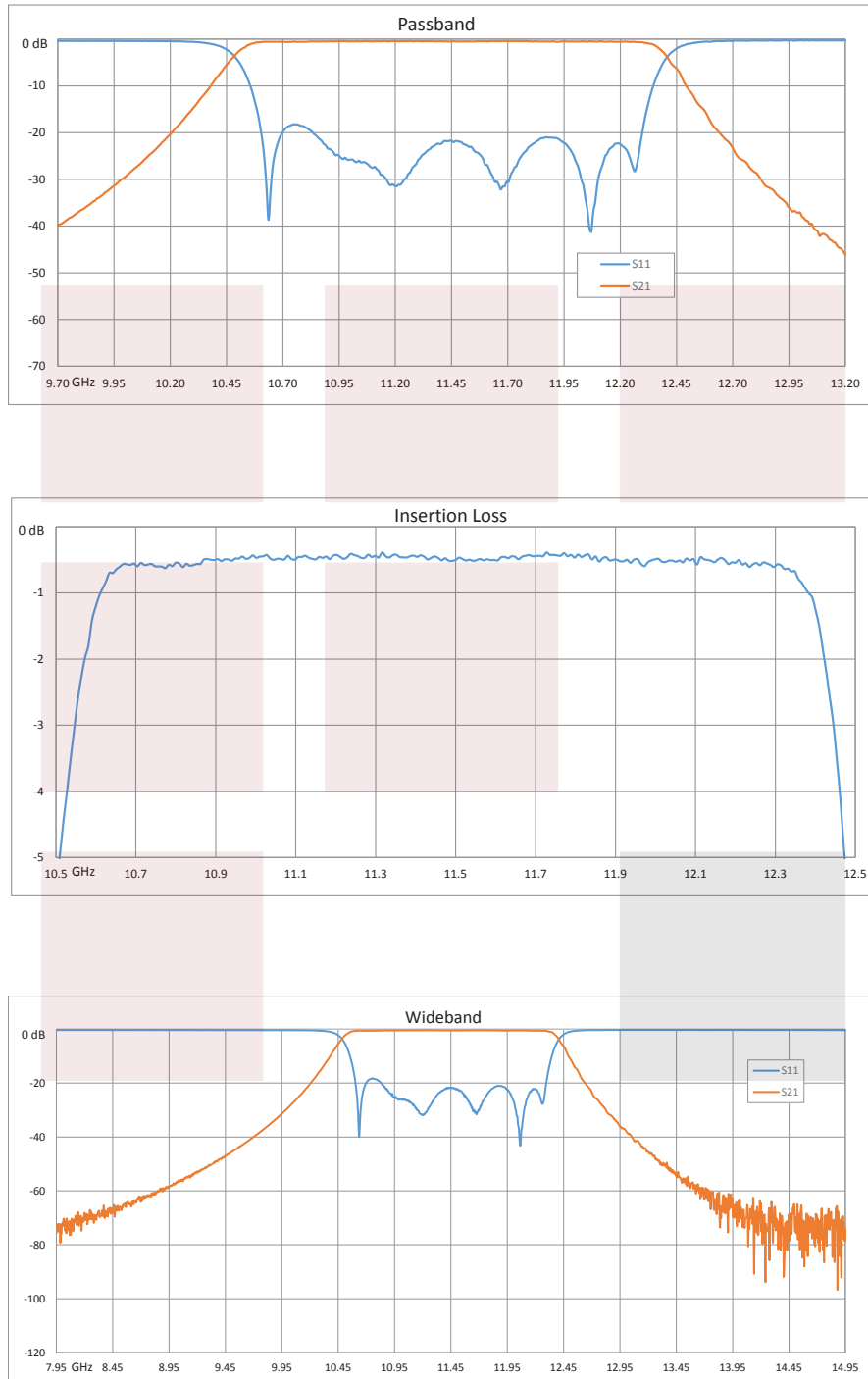
Pass band of 1500 MHz  
 10.7 GHz to 12.2 GHz  
 Six section  
 Comblaine filter design  
 50 dB rejection at 8.45 GHz and 14.45 GHz (3 GHz from band center)  
 Typical insertion loss of 1 dB  
 Female SMA connectors

**Applications:**

Satellite communications

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**Typical Performance Data**



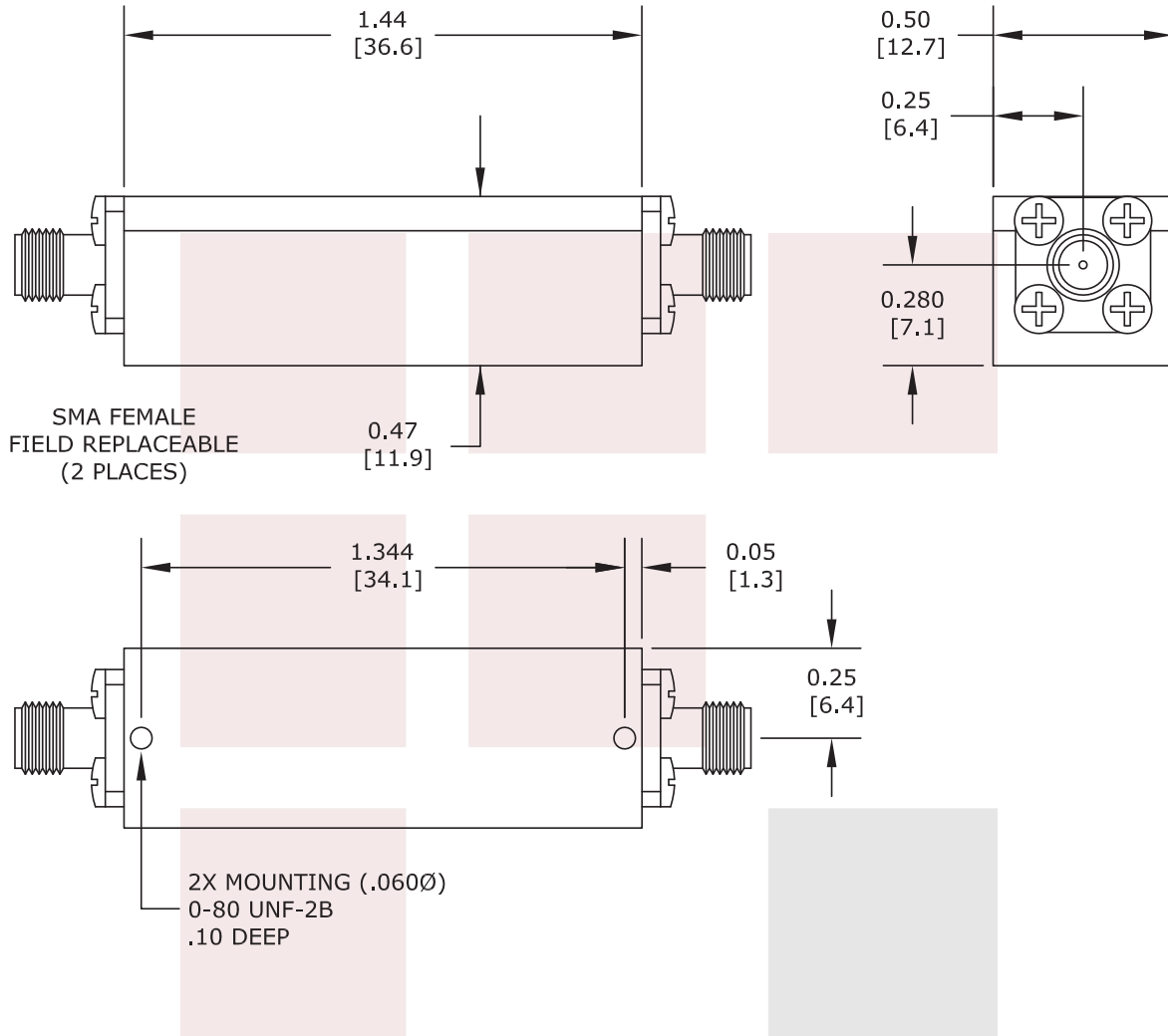
Bandpass Cavity Filter Operating From 10.7 GHz to 12.2 GHz With SMA Female Connectors from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Bandpass Cavity Filter Operating From 10.7 GHz to 12.2 GHz With SMA Female Connectors FMFL1003](#)

URL: <http://www.fairviewmicrowave.com/bandpass-cavity-filter-10.7-12.2-ghz-sma-female-connectors-fmfl1003-p.aspx>

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TOLERANCE	
.X	± .1
.XX	± .01
.XXX	± .005
.XXXX	± .0010

\* THESE DIMENSIONS AND TOLERANCES  
 SUPERSEDE NOTE #1 ON TITLE BLOCK.

<b>FAIRVIEW MICROWAVE INC.</b> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE Bandpass Cavity Filter Operating From 10.7 GHz to 12.2 GHz With SMA Female Connectors		DWG NO FMFL1003		CAGE CODE 3FKR5	
CAD FILE	120415	SHEET	SCALE	N/A	SIZE A 2233