

FB-1575SMG

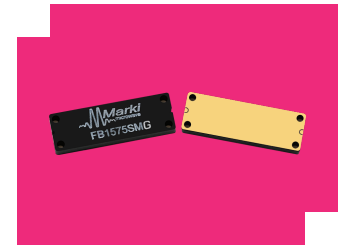
15.75 GHz Surface Mount Bandpass Filter

DEVICE OVERVIEW

General Description

The FB series bandpass filters are CAD-optimized microstrip filter designs built on a low-loss substrate. These filters feature low insertion loss, excellent return loss and are suitable for high rejection filtering.

[Download s-parameters here](#)



Features

- Chebyshev Response
- Typical 3 dB Bandwidth, $\pm 7.5\%$
- 50 dB Stop Band Suppression
- 5 Section Filter

Applications

- Test and Measurement Equipment
- SATCOM
- Radar
- RF Transceivers

Functional Block Diagram



Part Ordering Options

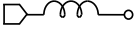
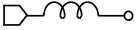
Part Number	Description	Package	Green Status	Product Lifecycle	Export Classification
FB-1575SMG	15.75 GHz Surface Mount Bandpass Filter	SMG	RoHS REACH	Released	EAR99

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Port Configuration and Functions

Port Functions

Port	Function	Description	Equivalent Circuit for Package
Pin 1	Input/Output	Port 1 is DC open to Port 2 and GND. GND is provided through the case.	
Pin 2	Input/Output	Port 2 is DC open to Port 1 and GND. GND is provided through the case.	

Specifications

Package Information

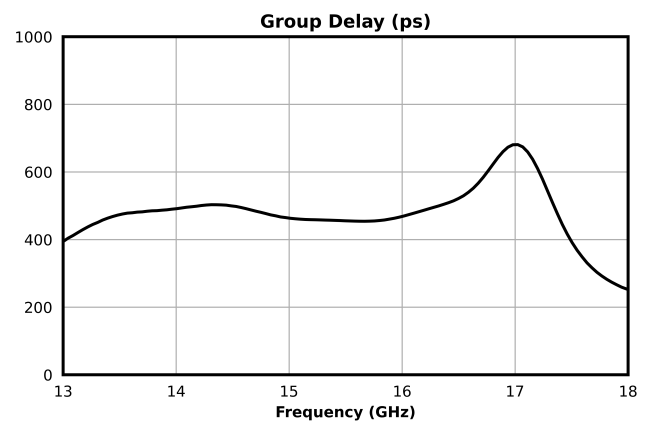
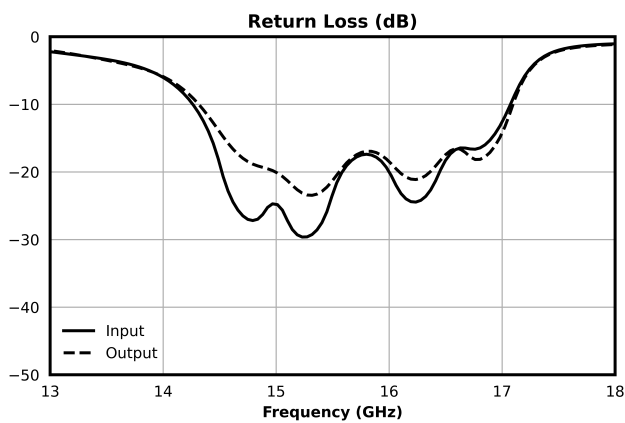
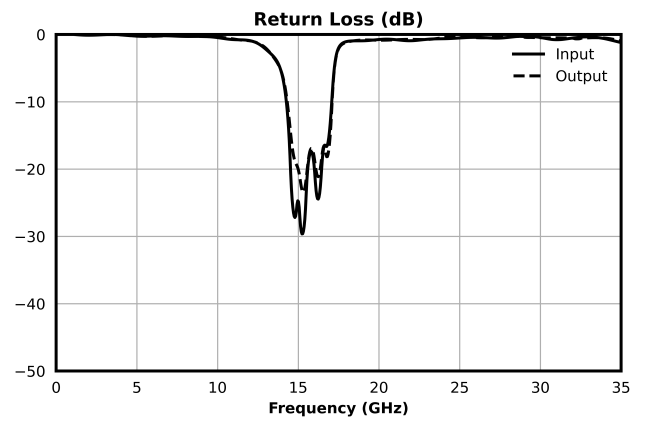
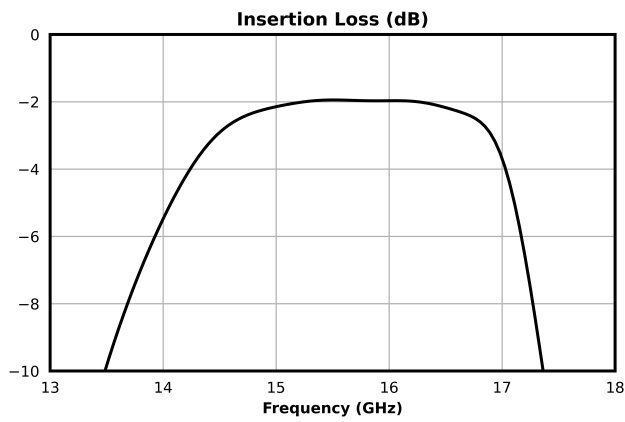
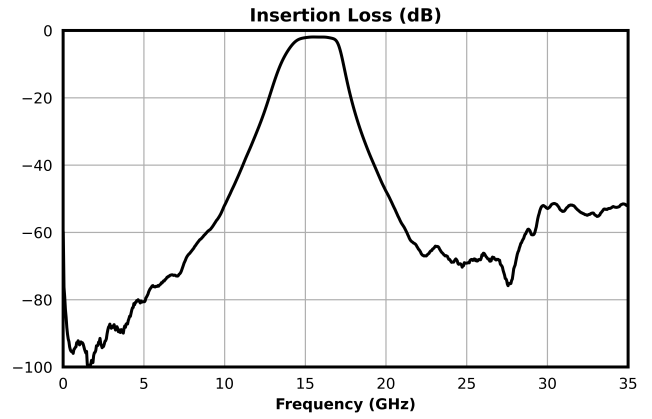
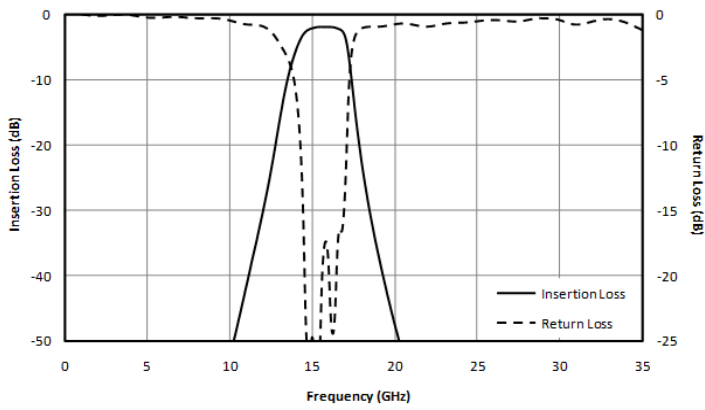
Parameter	Details	Rating
Dimensions	-	25.4 x 8.13 mm
Moisture Sensitivity Level	-	MSL 3

Electrical Specifications

Specifications guaranteed from -55 to +100°C, measured in a 50Ω system.

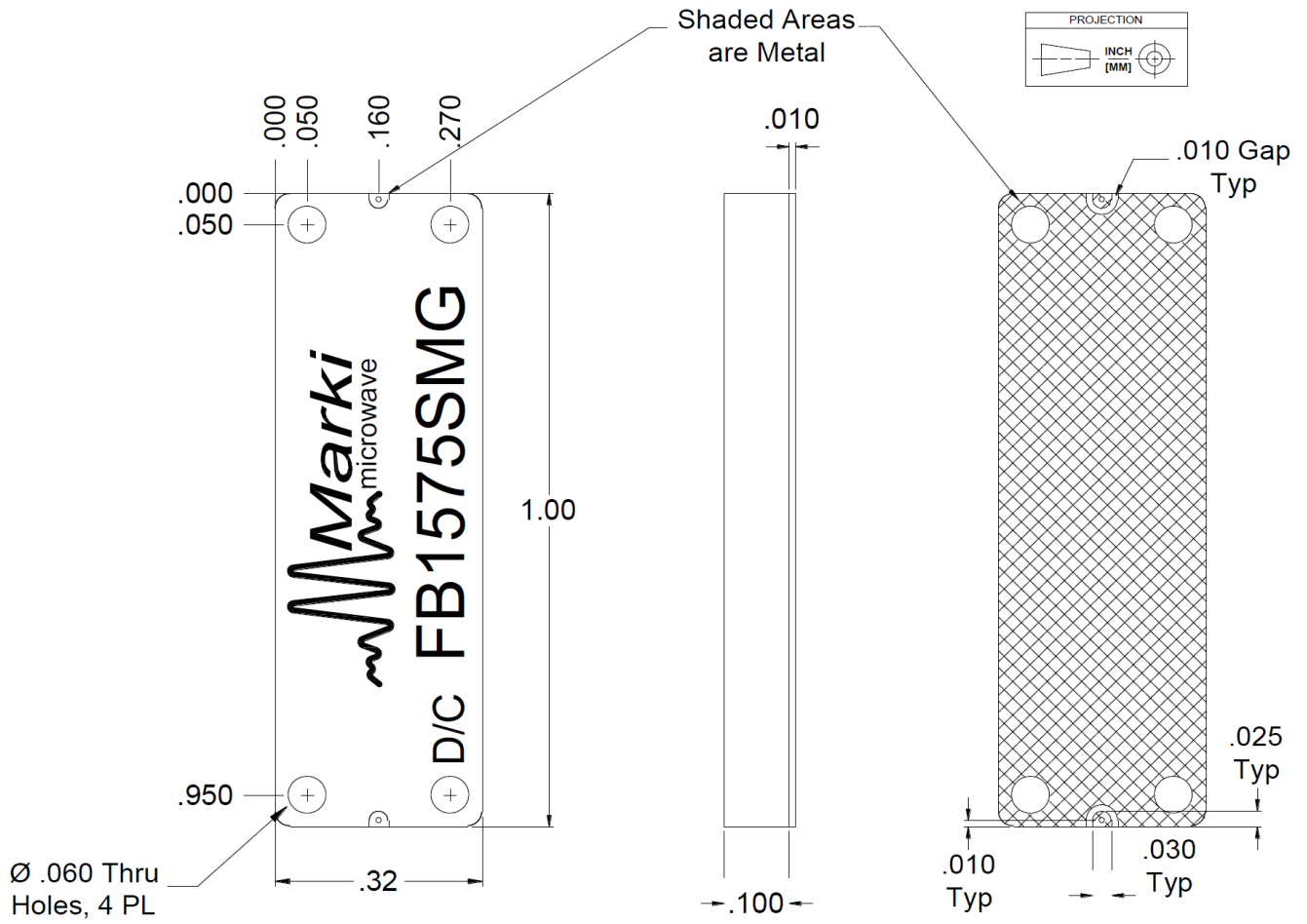
Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
1 dBc Passband	Configuration A, Temp = 25°C	14.53	16.89	-	-	-	GHz
3 dBc Passband	Configuration A, Temp = 25°C	14.09	17.07	-	-	-	GHz
30 dBc Rejection Point	Configuration A, Temp = 25°C	11.86	18.55	-	-	-	GHz
Center Freq	Configuration A, Temp = 25°C	-	-	-	15.67	-	GHz
Insertion Loss @ fc	Configuration A, Temp = 25°C	-	-	-	2.0	3.0	dB
Passband Return Loss	Configuration A, Temp = 25°C	-	-	-	19	-	dB
Group Delay	Configuration A, Temp = 25°C	-	-	-	473	-	ps
Impedance	Configuration A, Temp = 25°C	-	-	-	50	-	Ω
Stopband Suppression, High Band	18.9	18.9	18.9	-	35	-	dB
Stopband Suppression, High Band	20.3	-	-	-	50	-	dB
Stopband Suppression, Low Band	11.4	11.4	11.4	-	35	-	dB
Stopband Suppression, Low Band	9.9	-	-	-	50	-	dB
RF Power	-	-	-	-	-	1	W

Typical Performance Plot



Mechanical Data

Outline Drawing

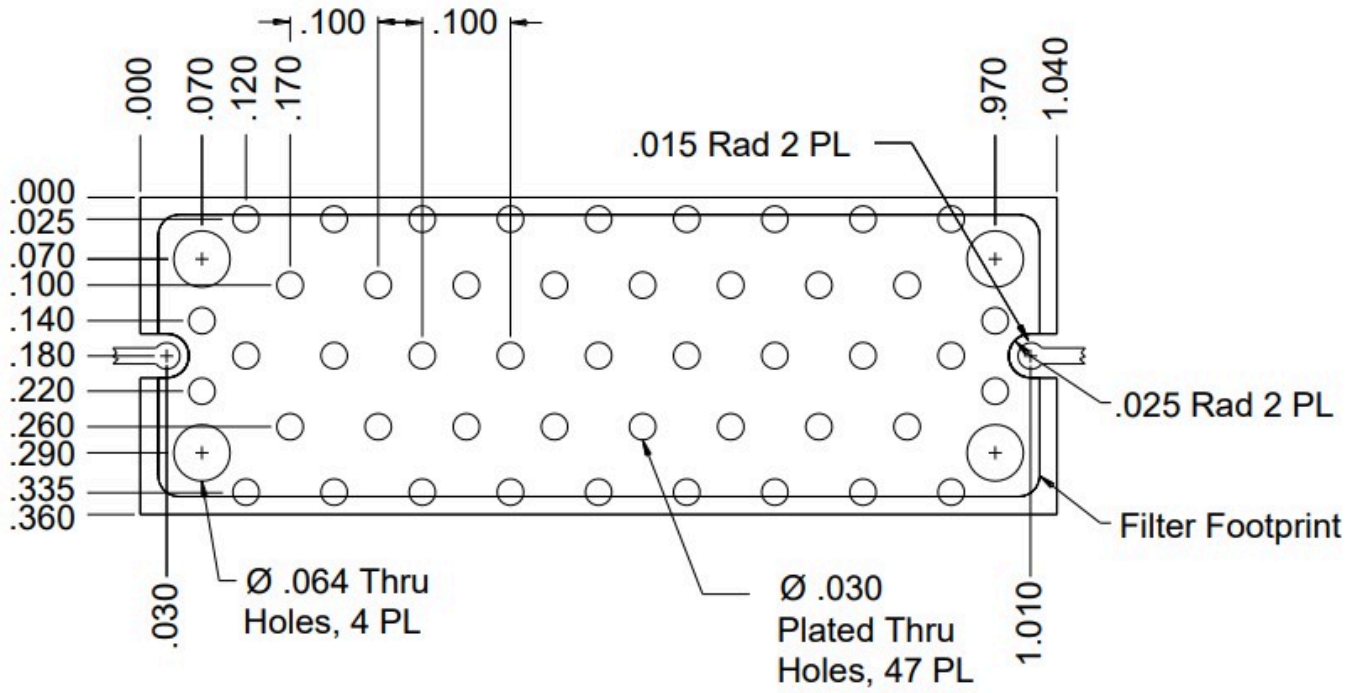


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15.75 GHz Surface Mount Bandpass Filter

Footprint Image

Download : [Footprint Drawing](#)



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