

FB-2250

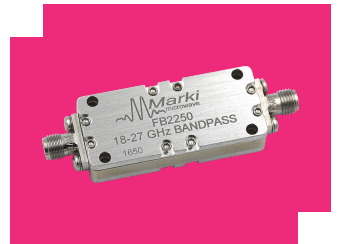
22.5GHz Bandpass Filter (K-Band)

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

- Passes Entire K-band (18-26.5 GHz)
- Low Insertion Loss
- Excellent Return Loss
- High Stop Band Suppression
- Wide Stop Band
- Sharp Roll-Off

Applications

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

Functional Block Diagram



Part Ordering Options

Part Number	Description	Connectors	Green Status	Product Lifecycle	Export Classification
FB-2250	22.5GHz Bandpass Filter (K-Band)	<u>Standard</u>	Non-RoHS	Released	EAR99

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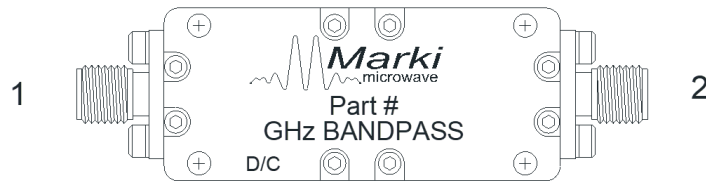
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Revision History


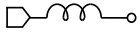
Revision Code	Revision Date	Comment
-	2013-07-25	Datasheet Initial Release

Port Configuration and Functions

Port Diagram



Port Functions

Port	Function	Connector Type	Description	DC Equivalent Circuit
Port 1	Input/Output	SMAF	Port 1 is DC open to Port 2 and GND. GND is provided through the case and RF connectors.	
Port 2	Input/Output	SMAF	Port 2 is DC open to Port 1 and GND. GND is provided through the case and RF connectors.	

Specifications

Package Information

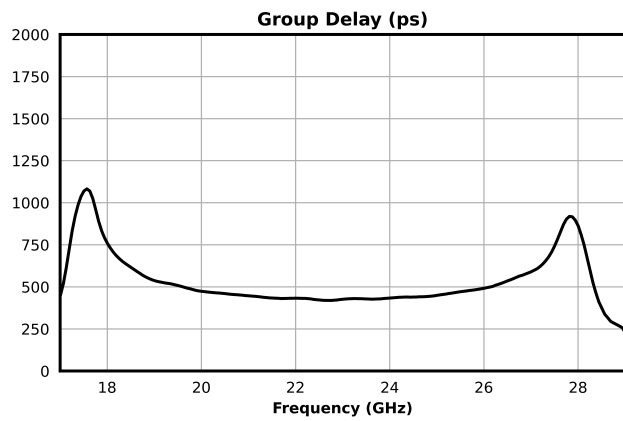
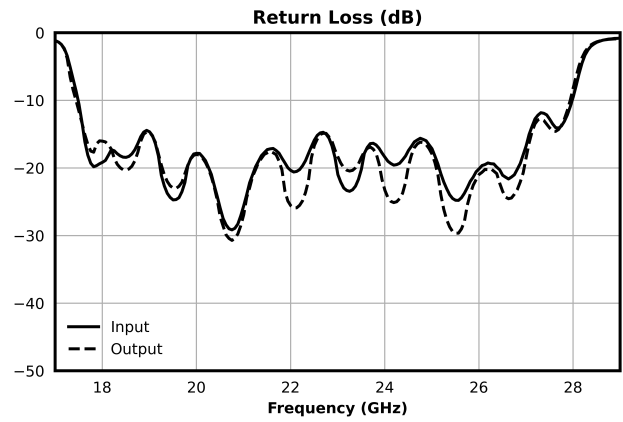
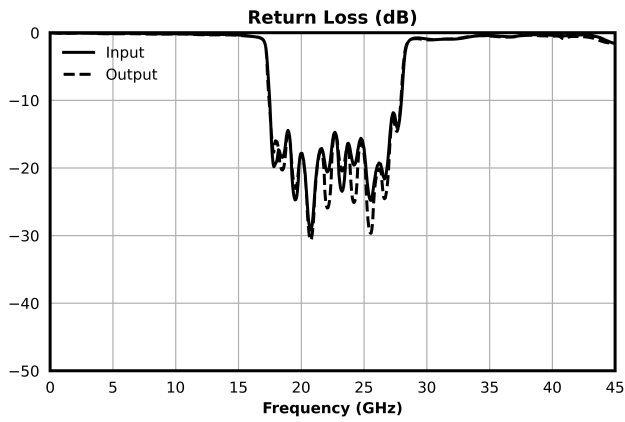
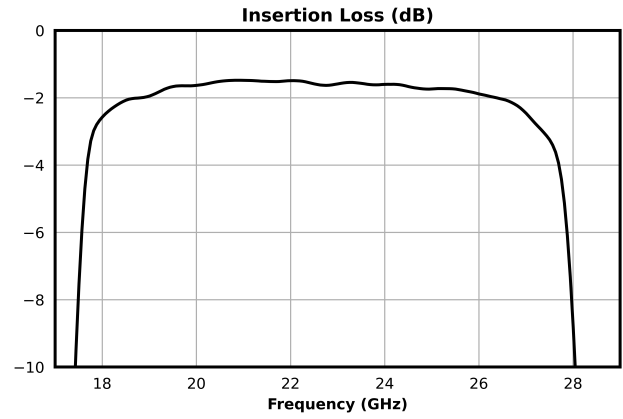
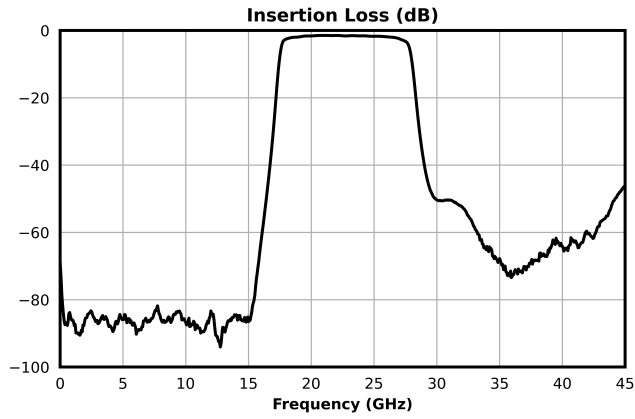
Parameter	Details	Rating
Weight	-	33g
Dimensions	-	43.18 x 18.8 mm

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	18.07	27	-	-	-	GHz
3 dBc Passband	Configuration A, Temp = 25°C	17.69	27.75	-	-	-	GHz
30 dBc Rejection Point	Configuration A, Temp = 25°C	16.94	28.63	-	-	-	GHz
Center Freq	Configuration A, Temp = 25°C	-	-	-	22.09	-	GHz
Insertion Loss @ fc	Configuration A, Temp = 25°C	-	-	-	1.5	-	dB
Passband Return Loss	Configuration A, Temp = 25°C	-	-	-	20	-	dB
Group Delay	Configuration A, Temp = 25°C	-	-	-	455	-	ps
Impedance	Configuration A, Temp = 25°C	-	-	-	50	-	Ω
RF Power	-	-	-	-	-	1	W
Stopband Suppression	16.3, 30GHz	16.3	30	40	50	-	dB
Stopband Suppression	16.8, 28.8GHz	16.8	28.8	25	30	-	dB

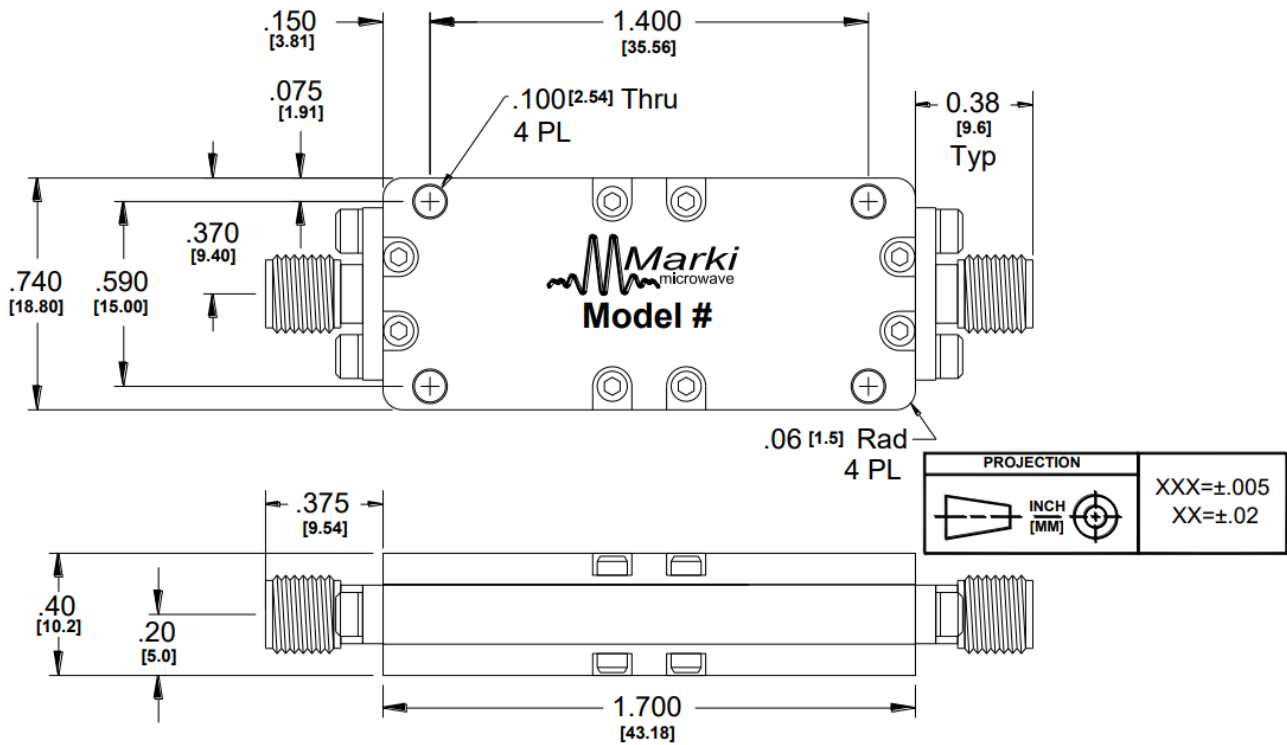
Typical Performance Plot



Mechanical Data

Outline Drawing

Download : [Outline 2D Drawing](#) | [Outline 3D Drawing](#) | [Outline 3D STP](#)



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