

FB-2060

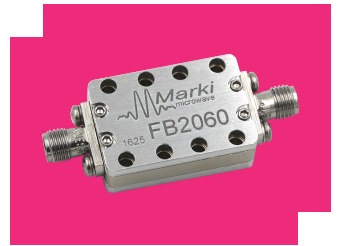
20.6 GHz Bandpass Filter

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

- 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-2060	20.6 GHz Bandpass Filter	<u>Standard</u>	Non-RoHS	Released	EAR99

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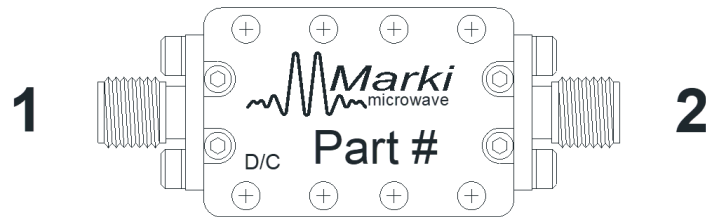
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Revision History


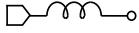
Revision Code	Revision Date	Comment
-	2012-06-06	Initial Date Release

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	-	22g
Dimensions	-	27.94 X 18.80 mm

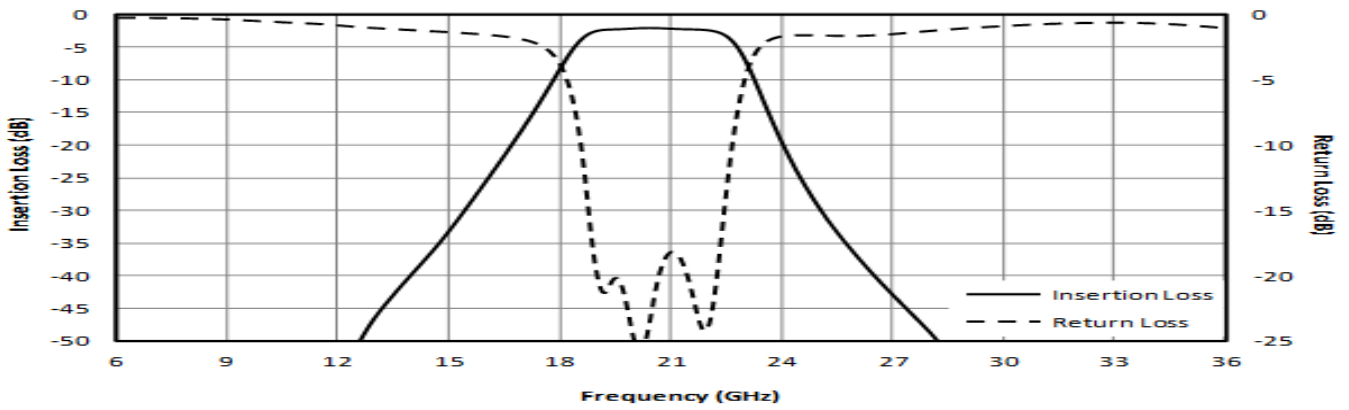
Electrical Specifications

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

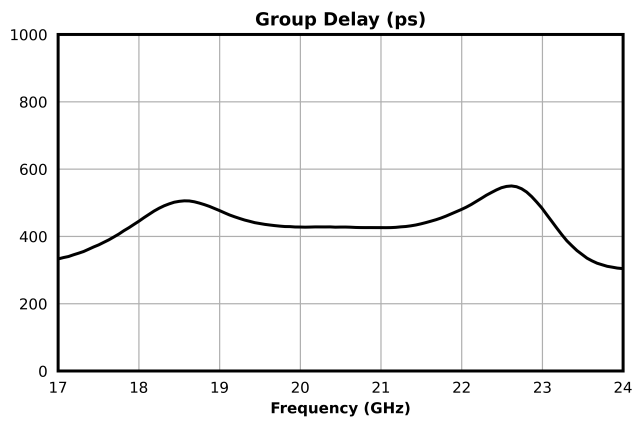
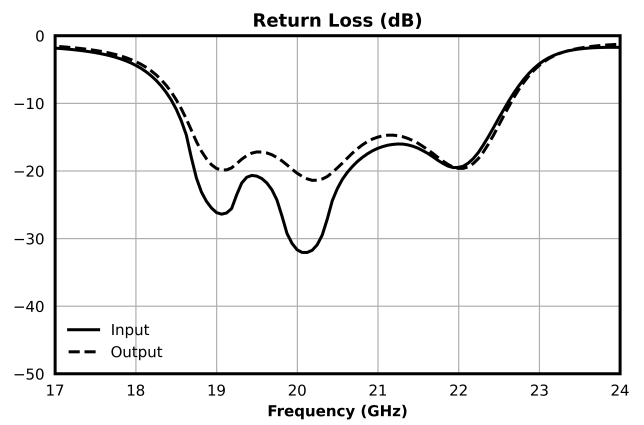
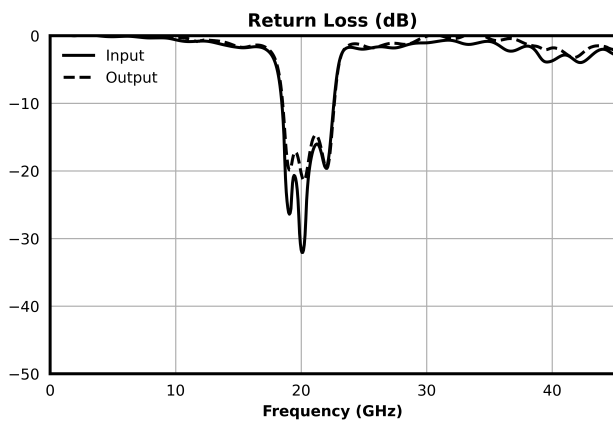
Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
1 dBc Passband ¹	Configuration A, Temp = 25°C	18.81	22.37	-	-	-	GHz
3 dBc Passband ²	Configuration A, Temp = 25°C	18.38	22.74	-	-	-	GHz
30 dBc Rejection Point ³	Configuration A, Temp = 25°C	15.07	25.36	-	-	-	GHz
Center Freq ⁴	Configuration A, Temp = 25°C	-	-	-	20.51	-	GHz
Insertion Loss @ fc ⁵	Configuration A, Temp = 25°C	-	-	-	2.1	-	dB
Passband Return Loss ⁶	Configuration A, Temp = 25°C	-	-	-	18	-	dB
Group Delay ⁷	Configuration A, Temp = 25°C	-	-	-	434	-	ps
Impedance ⁸	Configuration A, Temp = 25°C	-	-	-	50	-	Ω
Impedance	-	-	-	-	50	-	Ω
Passband	18.95-22.25 (± 8% of fc)	18.95	22.25	18.95	-	22.25	GHz
Passband Return Loss	18.95-22.25	18.95	22.25	10	15	-	dB
RF Power	-	-	-	-	-	1	W
Stopband Suppression	12.3, 28.3	12.3	28.3	40	50	-	dB
Stopband Suppression	15.2, 25.2	15.2	25.2	25	30	-	dB

[1][2][3][4][5][6][7][8] No

Typical Performance Plots



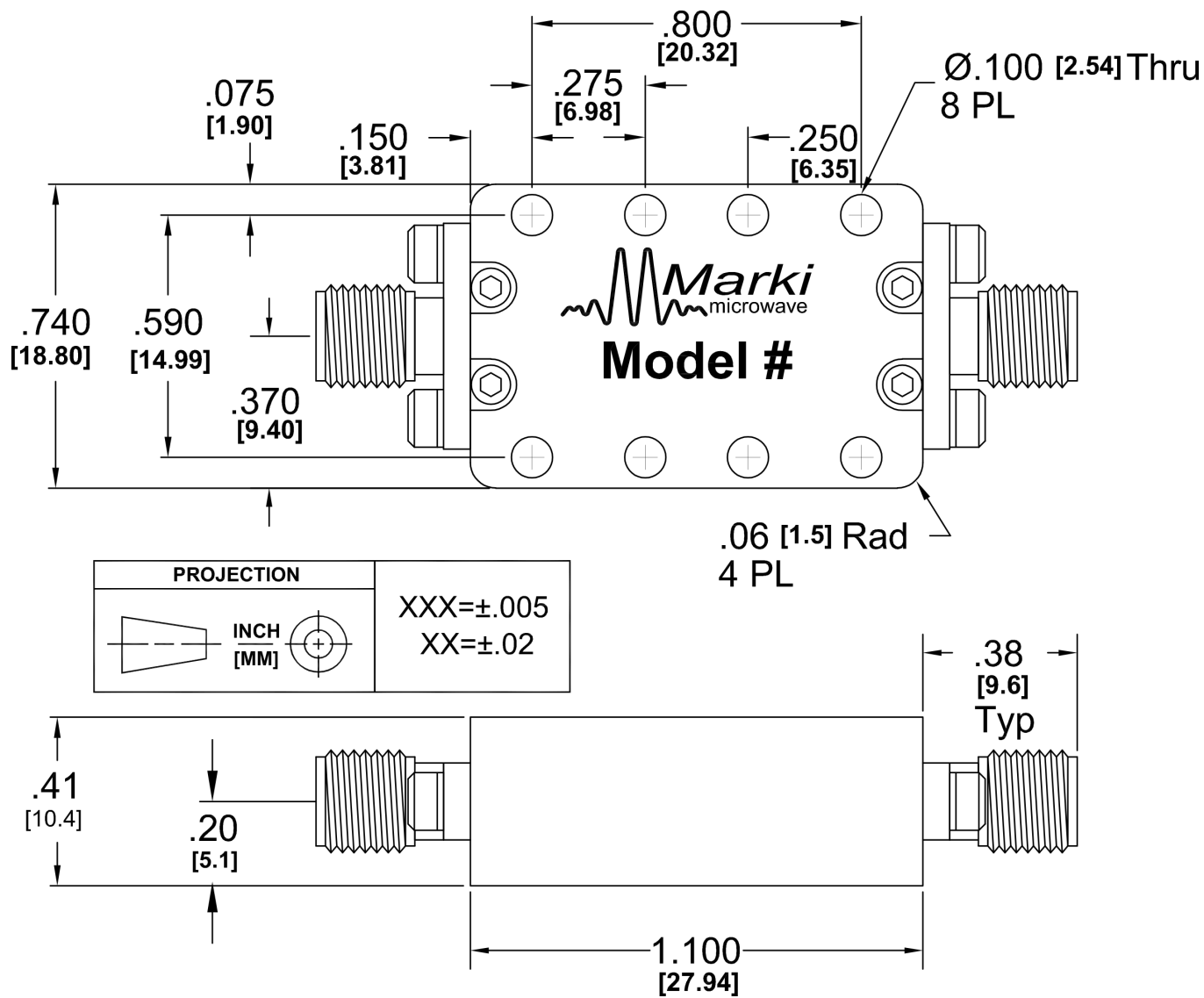
Typical Performance Plot



Mechanical Data

Outline Drawing

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



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