

FB-0905

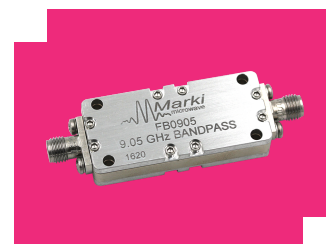
9.05 GHz Bandpass Filter

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	Package	Packing Size	Green Status	Product Lifecycle	Export Classification
FB-0905	9.05 GHz Bandpass Filter	-	-	Non-RoHS	Released	EAR99

Table Of Contents

- **Device Overview**
 - General Description
 - Features
 - Applications
 - Functional Block Diagram
- **Port Configuration and Functions**
 - Port Diagram
 - Port Functions
- **Revision History**
- **Specifications**
 - Package Information
 - Electrical Specifications
 - Typical Performance Plots
- **Mechanical Data**
 - Outline Drawing

Revision History

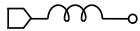
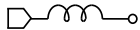
Revision Code	Revision Date	Comment
-	2016-11-29	Initial Date Release

Port Configuration and Functions

Port Diagram



Port Functions

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

Specifications

Package Information

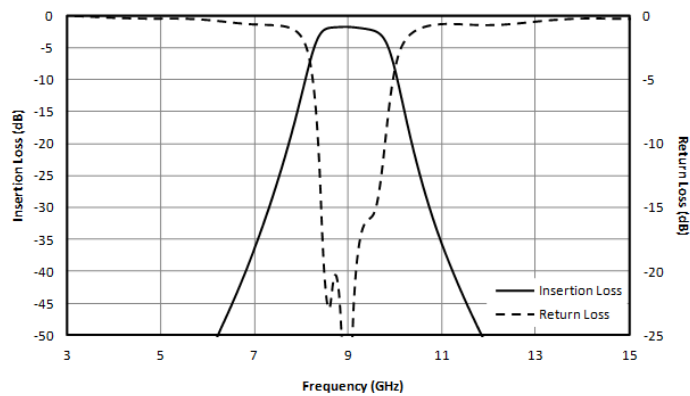
Parameter	Details	Rating
Weight	-	33g
Dimensions	-	43.18 x 18.8 mm

Electrical Specifications

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

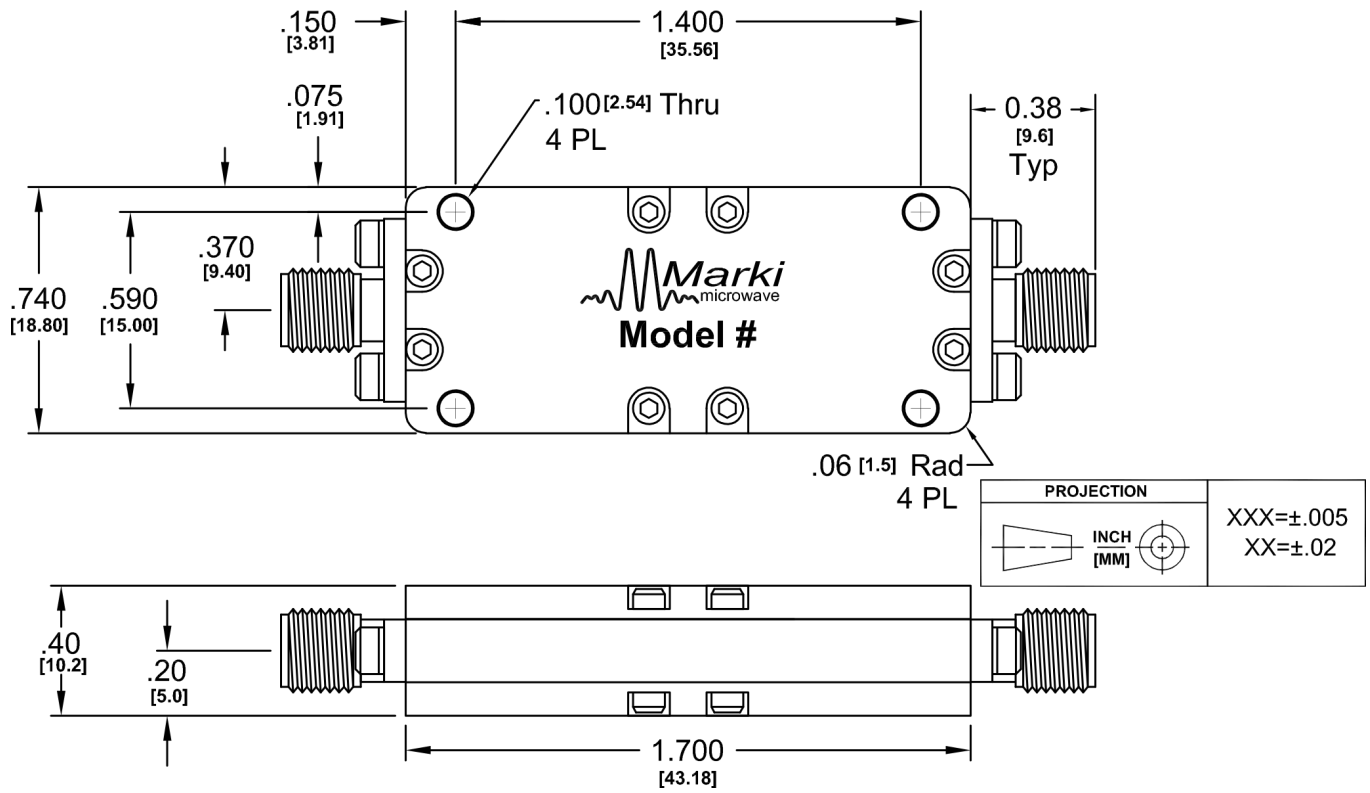
Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
Passband	8.45-9.65 ($\pm 6.5\%$ of f_c)	8.45	9.65	-	-	-	GHz
Passband Return Loss	8.45-9.65	8.45	9.65	10	15	-	dB
Stopband Suppression	5.6, 12.2	5.6	12.2	40	50	-	dB
Stopband Suppression	6.8, 11	6.8	11	25	30	-	dB
Impedance	-	-	-	-	50	-	Ω
Insertion Loss @ F_c	-	-	-	-	-	3	dB
RF Power	-	-	-	-	-	1	W
Center Frequency, f_c	9.05	9.05	9.05	-	-	-	GHz

Typical Performance Plots



Mechanical Data

Outline Drawing



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