

Switched Filter Bank

RF Pre-selector (20 - 1200 MHz)



Features

- Excellent IMD Suppression
- Low Insertion Loss: 4.5 dB
- Ripple: 0.8 dB
- Fast Switching: 1 μ Sec
- 60 dB Isolation Bit Signal & to RF Signal

Description

Spectrum Microwave's 310-020008-001 Switch Filter-bank provides two separate signal paths for a pair of 8 selectable RF filter channels over a wide range of frequencies with Excellent stopband performance.

Eight individual channels can be customized over a wide range of frequencies, typically over a 1 MHz to 2000 MHz range. Channels 1 through 8 are miniature Elliptical Lumped Element Bandpass Filters. This filter typology allows the 310-020008-001 to provide Superior close in stopband performance with exceptionally Low Insertion Loss.

The filter bank is powered through a filtered 15 pin D-Sub connector that is mounted on one end of the unit. Pin 13 applies +5 V, pins 2, 9, and 10 provide TTL selection of the desired operating channel, and Pin 9 provides an additional BIT select. The additional BIT select provides the end user with the ability to apply a test sweep to the input of the filterbank and check the performance without having to remove the unit from an installation. The unit has 5

Typical Specifications

Frequency (MHz)	20 - 33 (CH1)
	33 - 56 (CH2)
	56 - 88 (CH3)
	108 - 156 (CH4)
	156 - 260 (CH5)
	260 - 430 (CH6)
	430 - 720 (CH7)
	720 - 1200 (CH8)
Switching Speed	1 μS
Input 1 dB Comp.	14 dBm
IP2	70 dBm
IP3	34 dBm
VSWR	2.0:1 max
Insertion Loss	4.5 dB
Switching Type	TTL
DC Power	5V @ 40 mA
Temp Range	0°C to +70°C

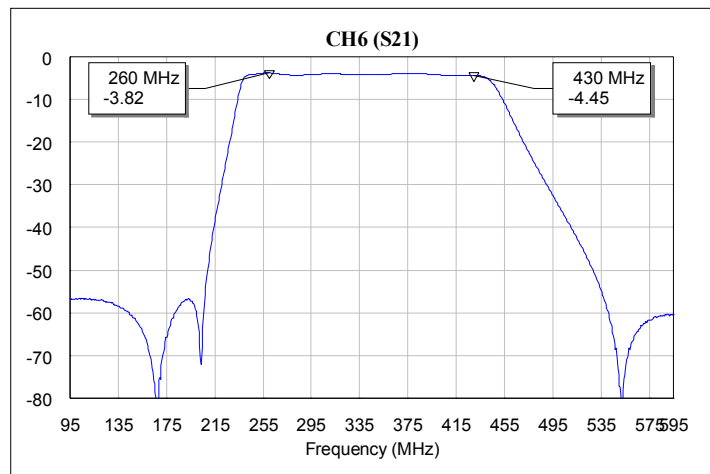
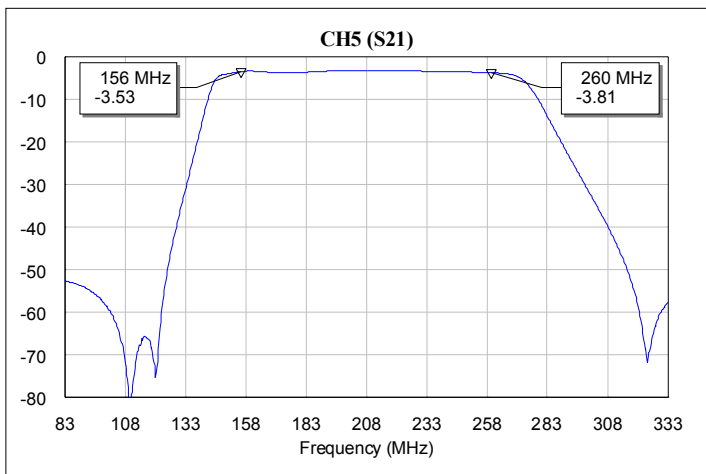
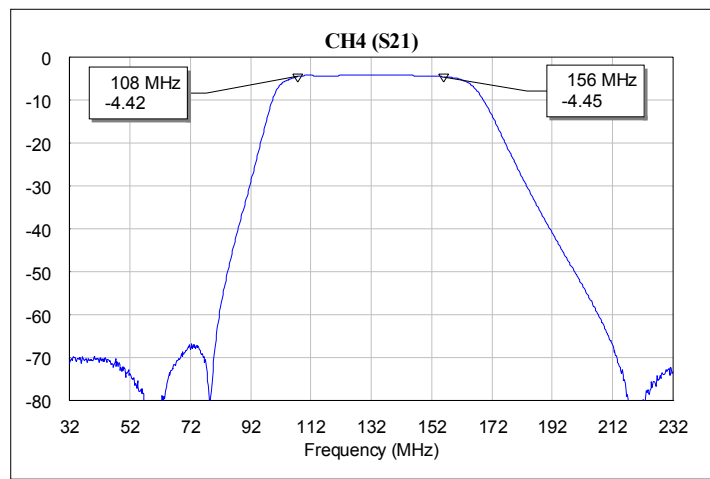
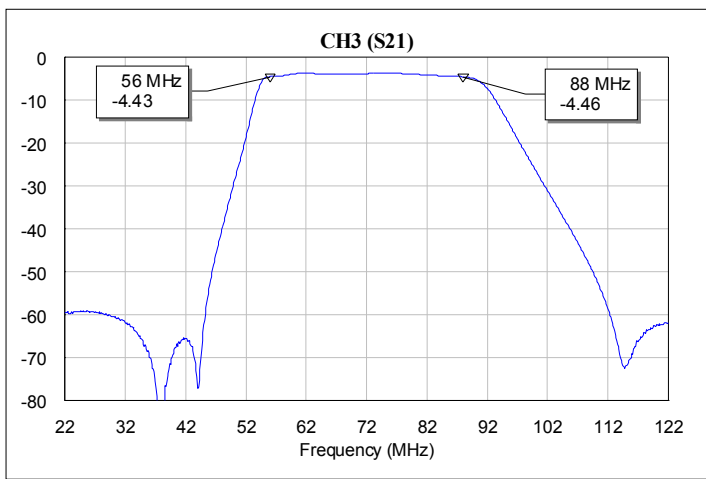
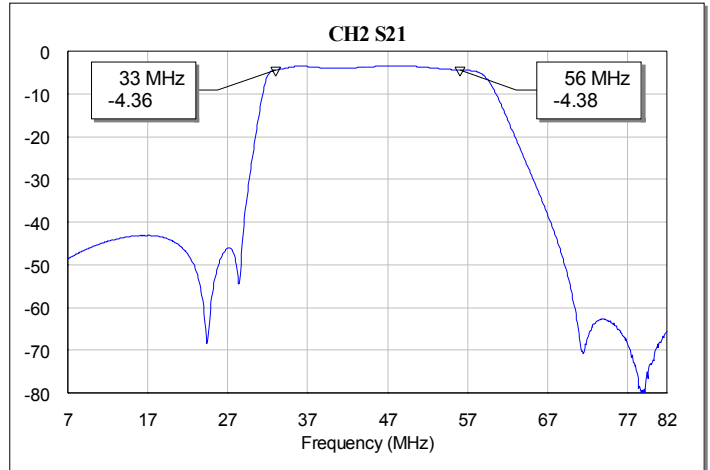
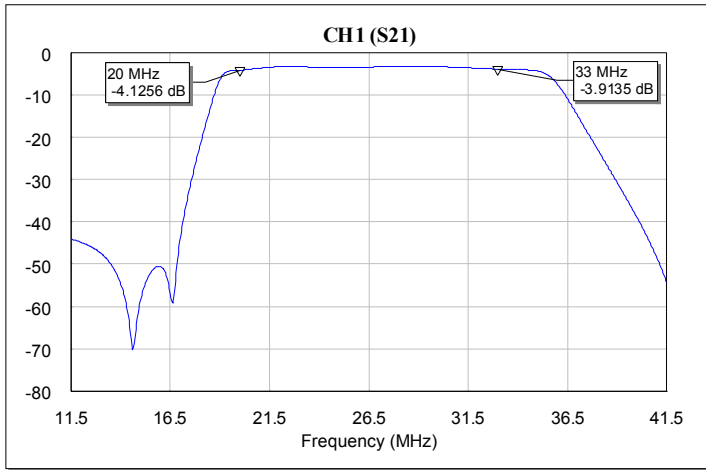
All specifications above measured at 25°C

Dimensions and Connections

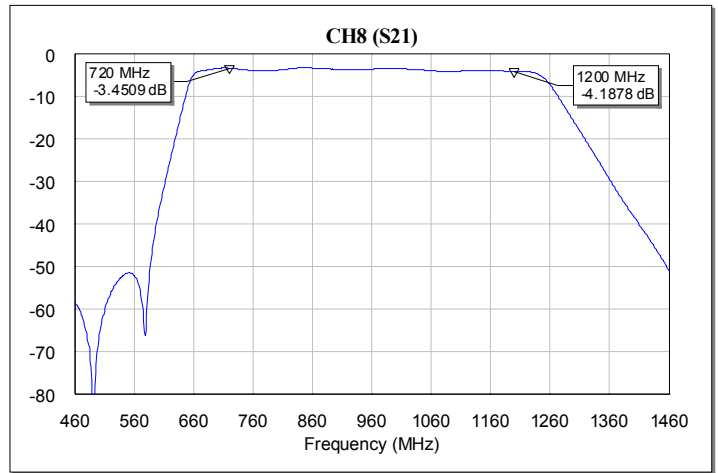
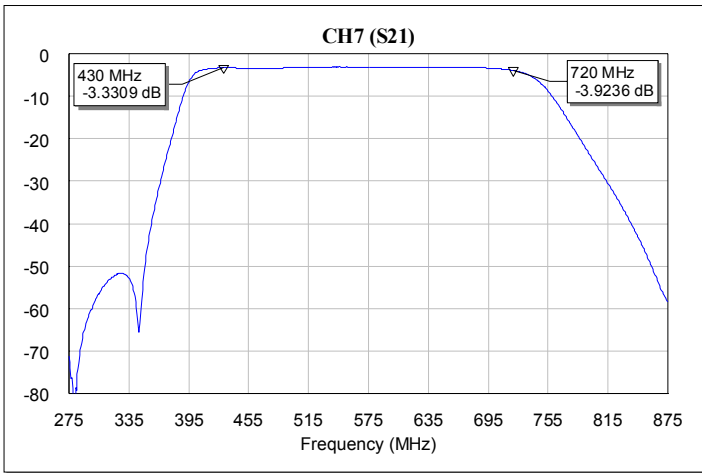
6.00" L x 4.30" W x 0.570" H excluding SMA connectors, D-SUB Connector, and mounting bracket. The chassis is machined aluminum with a silver plate finish.

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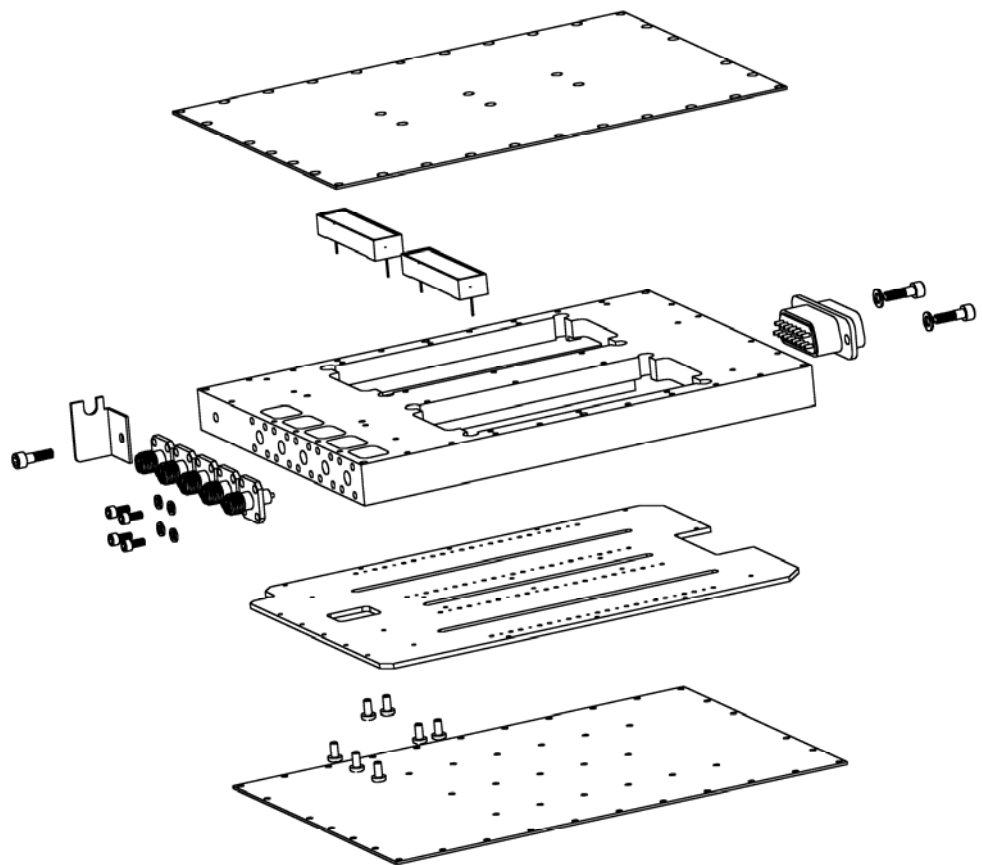


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S-Parameters for this model are available for download on our website.

Exploded View



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Block Diagram

