

## Cavity Band Rejection Filter with SMA Female Connectors Operating From 2110 MHz to 2170 MHz, Up to 50W CW



### Feature

- Stop Band Frequency: 2110~2170MHz
- Pass Band Frequency: DC~2085MHz & 2195~5500MHz
- Power Handling: Up to 50W CW
- SMA-Female Connectors
- Stop Band Rejection:  $\geq 50$  dB
- Low Insertion Loss:  $\leq 2.0$  dB typical in passband
- Excellent VSWR:  $\leq 1.5:1$  across passband

### Applications

- Aerospace & Defense
- Test & Measurement
- Microwave Radio Systems
- Military & Commercial Communication Systems
- Research & Development
- Wireless Communications
- Enterprise
- IoT

### Description

The BSF-MAJMAJ-2110-2170-01 is a high-performance cavity band rejection filter designed to provide deep and selective suppression of signals within the 2110 to 2170 MHz frequency band. It features a wide passband covering DC to 2085 MHz and 2195 to 5500 MHz with low insertion loss, making it an ideal solution for eliminating specific interference while maintaining signal integrity across a broad spectrum.

Engineered with a precision aluminum alloy cavity, this filter ensures excellent stopband rejection of  $\geq 50$  dB, low passband loss of  $\leq 2.0$  dB, and a high power handling capacity of up to 50W CW. Its robust construction and standard SMA-Female interfaces guarantee reliable operation in demanding applications such as communications infrastructure, radar systems, and advanced test setup.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Stop Band Frequency	2110		2170	MHz
Stop Band Rejection	50			dB
Pass Band Frequency (Low)	DC		2085	MHz
Pass Band Frequency (High)	2195		5500	MHz
Pass Band Insertion Loss			2.0	dB
Pass Band VSWR		1.5:1		
Impedance		50		Ohms
Input Power (CW)			50	Watts

Electrical Specification Notes: Values at 25°C, sea level.

### Mechanical Specifications

#### Size

Length	7.28 in [185 mm]
Width	2.00 in [51 mm]
Height	0.86 in [22 mm]

#### Connectors

Connector 1	SMA Female
Connector 2	SMA Female

### Environmental Specifications

#### Temperature

Operating Temperature:	-30°C ~ +70°C
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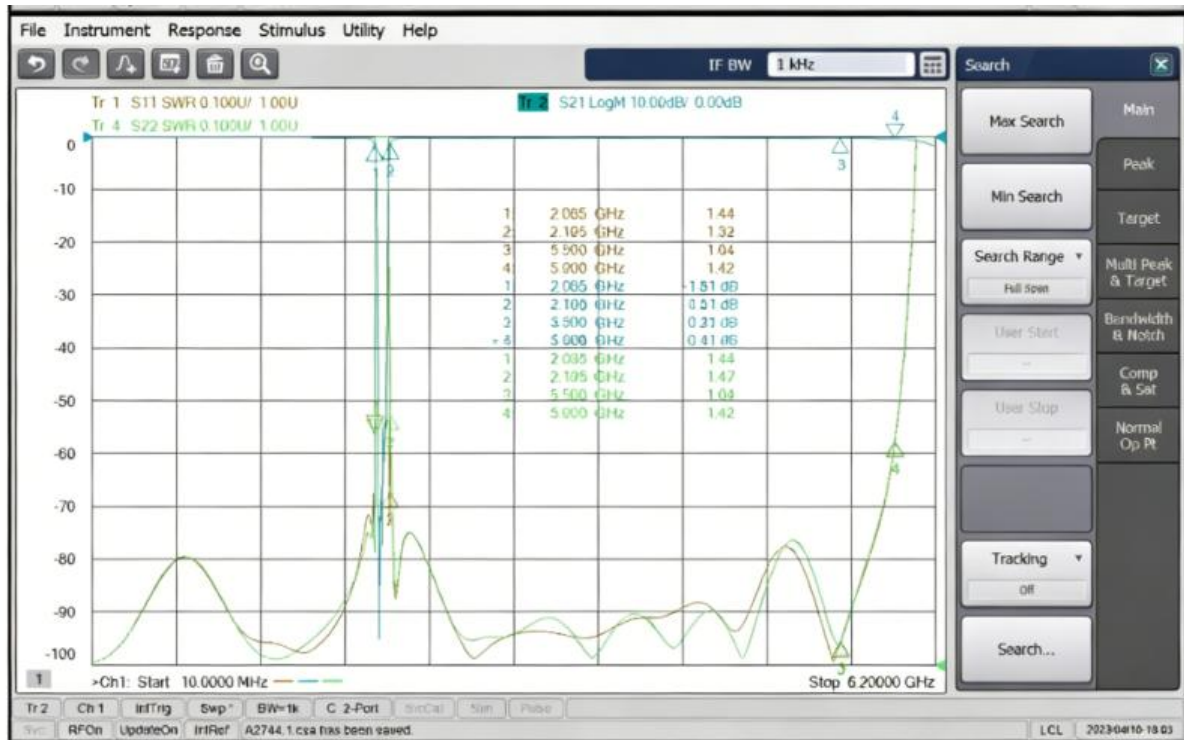
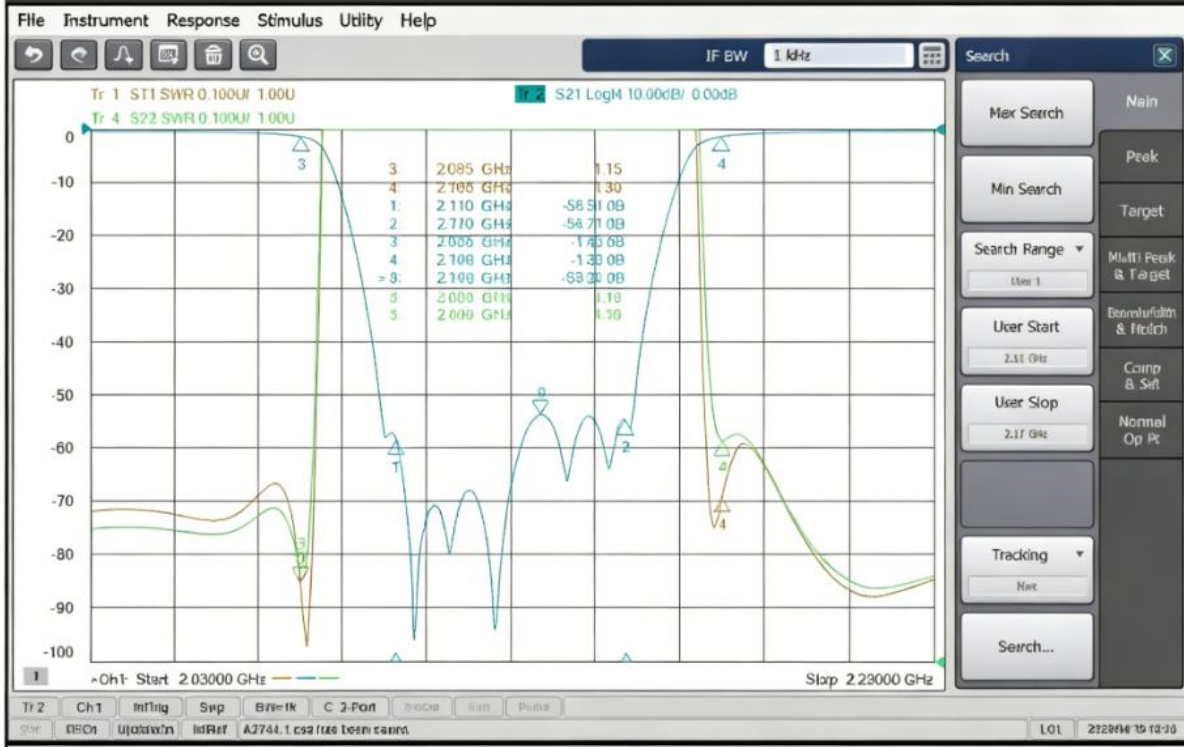
### Compliance Certifications

RoHS Compliant	REACH Compliant
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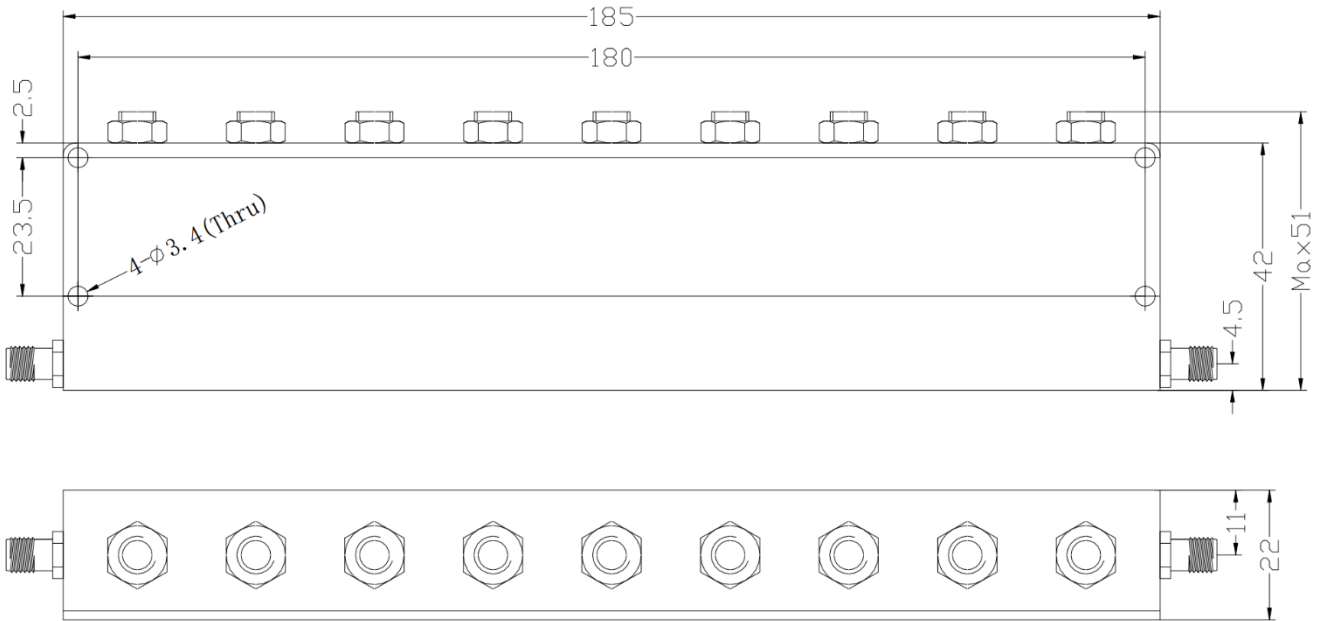


### Typical Performance data





### CAD Drawing



Dimensions Unit: mm, Dimensions Tolerance:  $\pm 0.5$ mm