

Cavity Band Rejection Filter with SMA Female Connectors Operating From 2300 MHz to 2400 MHz, Up to 30W CW



Cavity Band Rejection Filter Technical Data Sheet

PN: BSF-MAJMAJ-2300-2400-01 REV-A0

Feature

- Stop Band Frequency: 2300~2400MHz
- Pass Band Frequency: DC~2260MHz & 2440~6200MHz
- Power Handling: Up to 30W CW
- SMA-Female Connectors
- Stop Band Rejection: ≥ 60 dB
- Low Insertion Loss: ≤ 1.5 dB (at the corner: 2.0dB Max.)
- 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-2300-2400-01 is a high-performance cavity band rejection filter designed to provide deep and selective suppression of signals within the 2300 to 2400 MHz frequency band. It features a wide passband covering DC to 2260 MHz and 2440 to 6200MHz 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 ≥ 60 dB, low passband loss of ≤ 2.0 dB, and a high power handling capacity of up to 30W 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	2300		2400	MHz
Stop Band Rejection	50			dB
Pass Band Frequency (Low)	DC		2260	MHz
Pass Band Frequency (High)	2440		6200	MHz
Pass Band Insertion Loss			2.0	dB
Pass Band VSWR			1.5:1	
Impedance		50		Ohms
Input Power (CW)			30	Watts

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

Mechanical Specifications

Size

Length	8.22 in [209 mm]
Width	1.85 in [47 mm]
Height	1.10 in [22 mm]

Connectors

Connector 1	SMA Female
Connector 2	SMA Female

Environmental Specifications

Temperature

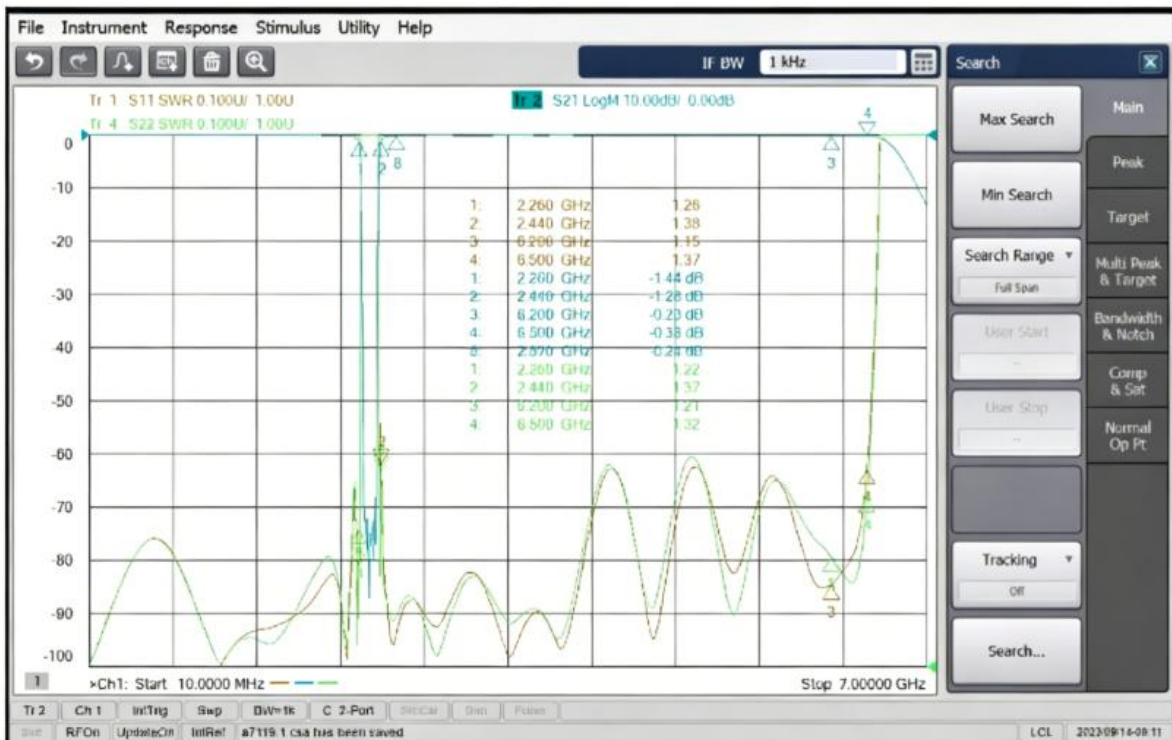
Operating Temperature:	0°C ~ +50°C
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Compliance Certifications

RoHS Compliant	REACH Compliant
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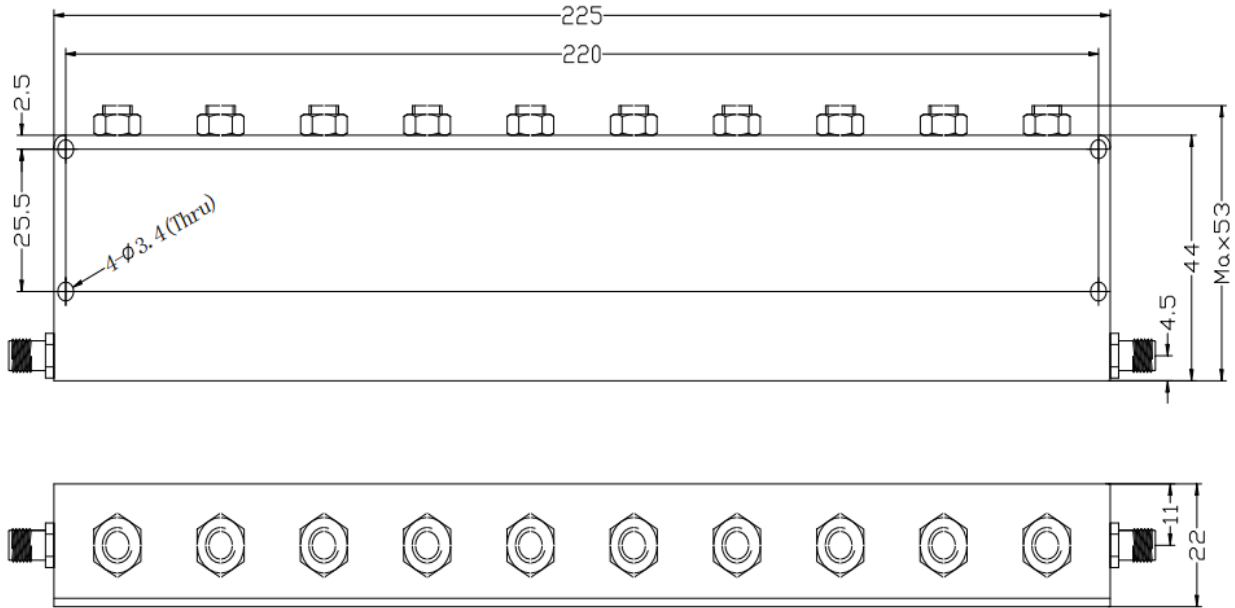


Type Performance:





CAD Drawing



Dimensions Unit: mm, Dimensions Tolerance: ± 0.5 mm