

Cavity Band Rejection Filter with SMA Female Connectors Operating From 869 MHz to 894 MHz, Up to 50W CW



Feature

- Stop Band Frequency: 849~894MHz
- Pass Band Frequency: DC~849MHz & 914~2600MHz
- Power Handling: Up to 50W CW
- SMA-Female Connectors
- Stop Band Rejection: ≥40 dB
- Low Insertion Loss: ≤2.0 dB typical in passband
- Excellent VSWR: ≤1.7:1 across passband

Applications

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

Description

The BSF-MAJMAJ-0869-0894-01 is a high-performance cavity band rejection filter designed to provide deep and selective suppression of signals within the 869 to 894 MHz frequency band. It features a wide passband covering DC to 849 MHz and 914 to 2600 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 ≥40 dB, low passband loss of ≤2.0dB, 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	849		894	MHz
Stop Band Rejection	50			dB
Pass Band Frequency (Low)	DC		849	MHz
Pass Band Frequency (High)	914		2600	MHz
Pass Band Insertion Loss			2.0	dB
Pass Band VSWR @ DC~849MHz			1.5:1	
Pass Band VSWR @ 914~2300MHz			1.5:1	
Pass Band VSWR @2300~2600MHz			1.7:1	
Impedance		50		Ohms
Input Power (CW)			50	Watts

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

Mechanical Specifications

Size

Length	8.70 in [221 mm]
Width	3.62 in [92 mm]
Height	1.10 in [28 mm]

Connectors

Connector 1	SMA Female
Connector 2	SMA Female

Environmental Specifications

Temperature

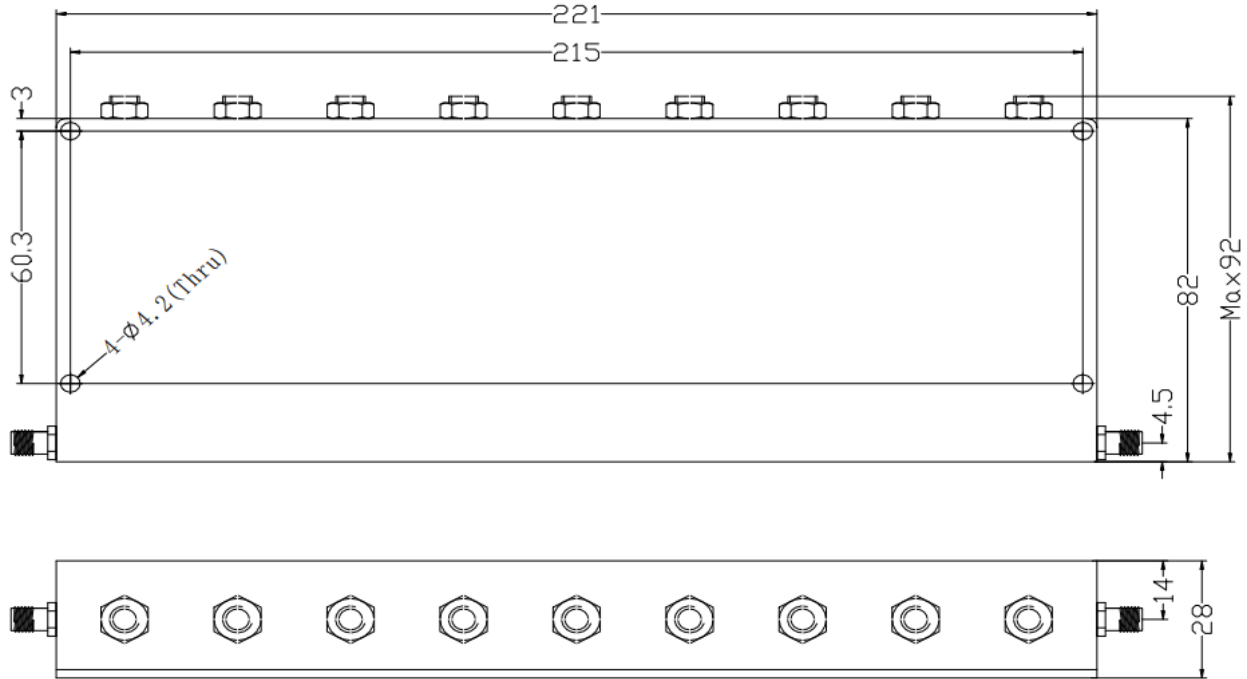
Operating Temperature:	-40°C ~ +70°C
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Compliance Certifications

RoHS Compliant	REACH Compliant
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CAD Drawing



Dimensions Unit: mm, Dimensions Tolerance: ± 0.5 mm