

## Cavity Band Rejection Filter with SMA Female Connectors Operating From 791 MHz to 821 MHz, Up to 50W CW



### Feature

- Stop Band Frequency: 791~821MHz
- Pass Band Frequency: DC~773MHz & 839~2500MHz
- Power Handling: Up to 50W CW
- SMA-Female Connectors
- Stop Band Rejection: ≥50 dB
- Low Insertion Loss: ≤1.5 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-0791-0821-01 is a high-performance cavity band rejection filter designed to provide deep and selective suppression of signals within the 791 to 821 MHz frequency band. It features a wide passband covering DC to 773 MHz and 839 to 2500 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 ≥50 dB, low passband loss of ≤1.5 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	791		821	MHz
Stop Band Rejection	50			dB
Pass Band Frequency (Low)	DC		773	MHz
Pass Band Frequency (High)	839		2500	MHz
Pass Band Insertion Loss			1.5	dB
Pass Band VSWR @ DC~773MHz			1.5:1	
Pass Band VSWR @ 839~2200MHz			1.5:1	
Pass Band VSWR @ 2200~2500MHz			1.7:1	
Impedance		50		Ohms
Input Power (CW)			50	Watts

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

### Mechanical Specifications

#### Size

Length	9.40 in [239 mm]
Width	3.74 in [95 mm]
Height	1.10 in [28 mm]

#### Connectors

Connector 1	SMA Female
Connector 2	SMA Female

### Environmental Specifications

#### Temperature

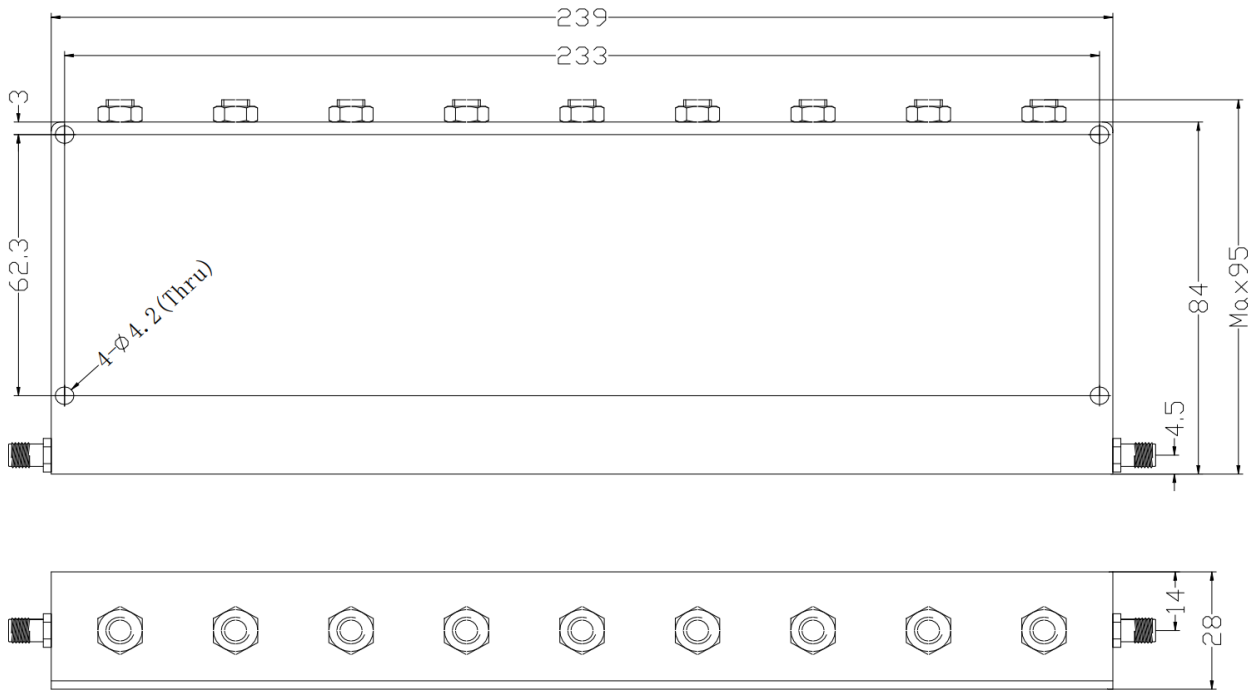
Operating Temperature:	-40°C ~ +70°C
------------------------	---------------

### Compliance Certifications

RoHS Compliant	REACH Compliant
----------------	-----------------



### CAD Drawing



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