

# Surface Mount Band Stop Filter

## BSF-C70+

50Ω      56.75 to 83.25 MHz

### The Big Deal

- High rejection, 51 dB typical
- Stopband (56.75 to 83.25 MHz)
- Miniature shielded package



CASE STYLE: HU1186

### Product Overview

The BSF-C70+ is stopband filter fabricated using SMT Technology. Covering 56.75 to 83.25 MHz stopband, this units offer good rejection. This unit uses a miniature high Q capacitors and wire welded inductors for high reliability. It has repeatable performance across production lots and consistent performance across temperature.

### Key Features

| Feature                       | Advantages   |
|-------------------------------|--|
| High rejection, 51 dB typical | BSF-C70+ enables the filter to attenuate spurious signals and reject harmonics for broadband of frequencies. |
| Shielded package              | Shielded package (Size of .087" x 0.80" x 0.25") reduced interface with and from the surrounding components. |
| Application                   | Useful in broadcast systems and SATCOM transceiver   |

#### Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.  
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.  
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## BSF-C70+

50Ω 56.75 to 83.25 MHz



CASE STYLE: HU1186

### Features

- High rejection, 51 dB typical
- Aqueous washable
- Miniature shielded package

### Applications

- FM radio
- Broadcast system
- SATCOM transceiver
- Lab use

### Electrical Specifications at 25°C

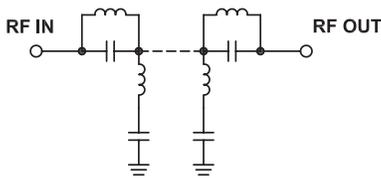
| Parameter        | F#             | Frequency (MHz) | Min.          | Typ. | Max. | Unit |    |
|------------------|----------------|-----------------|---------------|------|------|------|----|
| Pass Band, Lower | Insertion Loss | DC-F1           | DC - 37       | -    | 0.4  | 1.2  | dB |
|                  | VSWR           | DC-F1           | DC - 37       | -    | 1.3  | 1.7  | :1 |
| Stop Band        | Rejection      | F4-F5           | 56.75 - 83.25 | 30   | 51   | -    | dB |
|                  | VSWR           | F4-F5           | 56.75 - 83.25 | -    | 22   | -    | :1 |
| Pass Band, Upper | Insertion Loss | F2-F3           | 120-1200      | -    | 0.7  | 1.5  | dB |
|                  | VSWR           | F2-F3           | 120-1200      | -    | 1.3  | 1.7  | :1 |

### Maximum Ratings

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C  |
| Storage Temperature   | -55°C to 100°C |
| RF Power Input        | 250 mW max.    |

Permanent damage may occur if any of these limits are exceeded.

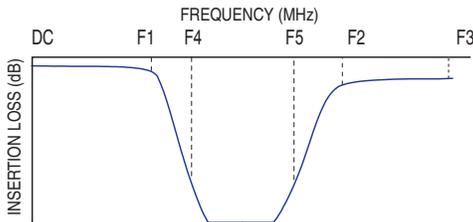
### Functional Schematic



### Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 1.00            | 0.05                | 1.02      |
| 5.00            | 0.07                | 1.09      |
| 15.00           | 0.15                | 1.24      |
| 37.00           | 0.38                | 1.21      |
| 42.00           | 1.55                | 2.06      |
| 44.00           | 5.86                | 6.37      |
| 47.00           | 17.86               | 23.49     |
| 50.00           | 32.28               | 38.61     |
| 56.75           | 68.13               | 57.91     |
| 66.50           | 61.56               | 22.00     |
| 70.00           | 58.82               | 64.35     |
| 83.25           | 65.40               | 42.38     |
| 87.00           | 43.21               | 34.75     |
| 90.00           | 31.96               | 28.96     |
| 95.00           | 18.75               | 18.30     |
| 100.00          | 8.78                | 7.47      |
| 104.00          | 3.63                | 2.92      |
| 120.00          | 0.67                | 1.14      |
| 750.00          | 0.29                | 1.05      |
| 1200.00         | 0.44                | 1.13      |

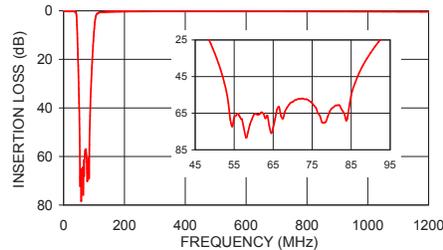
### Typical Frequency Response



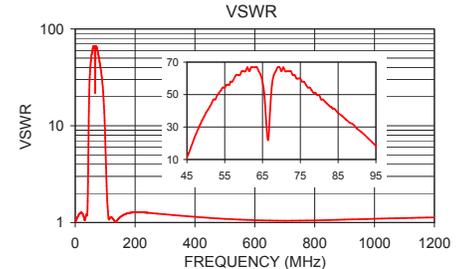
### +RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

BSF-C70+  
INSERTION LOSS



BSF-C70+  
VSWR



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