

# Surface Mount Band Stop Filter

## BSF-C5468+

50Ω 54 to 68 MHz

### The Big Deal

- High rejection, 47 dB typical
- Stopband (54 to 68 MHz)
- Miniature shielded package



CASE STYLE: HU1186

### Product Overview

The BSF-C5468+ is stopband filter fabricated using SMT Technology. Covering 54 to 68 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, 47 dB typical	BSF-C5468+ 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	Can be used in broadcast and FM system

#### 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.  
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)





# Surface Mount Band Stop Filter

50Ω 54 to 68 MHz

## BSF-C5468+



CASE STYLE: HU1186

### Features

- High rejection, 47 dB typical
- Aqueous washable
- Miniature shielded package

### Applications

- FM radio
- Broadcast system
- Lab use

### Electrical Specifications at 25°C

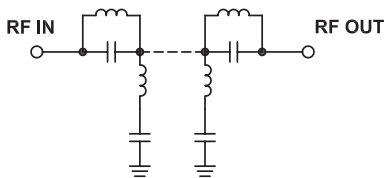
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band, Lower	Insertion Loss	DC-F1	DC - 42	-	0.6	dB
	VSWR	DC-F1	DC - 42	-	1.3	:1
Stop Band	Rejection	F4-F5	54 - 68	30	47	dB
	VSWR	F4-F5	54 - 68	-	13	:1
Pass Band, Upper	Insertion Loss	F2-F3	94-1250	-	0.8	dB
	VSWR	F2-F3	94-1250	-	1.3	:1

### Maximum Ratings

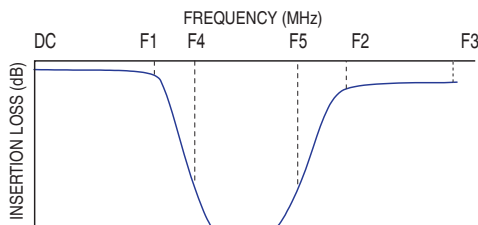
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	250 mW max.

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

### Functional Schematic



### Typical Frequency Response



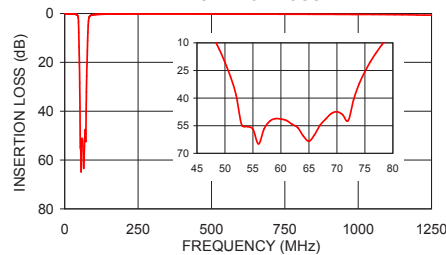
### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	0.03	1.01
15	0.11	1.15
42	0.60	1.16
47	3.55	2.84
48	7.71	5.89
50	20.58	13.81
51	28.52	16.26
54	55.45	20.95
62	54.22	13.29
68	51.37	23.81
73	40.68	18.70
75	25.64	15.00
78	11.20	7.22
79	7.65	4.82
80	4.92	3.08
81	3.12	2.04
94	0.56	1.12
120	0.33	1.25
800	0.29	1.06
1250	0.68	1.09

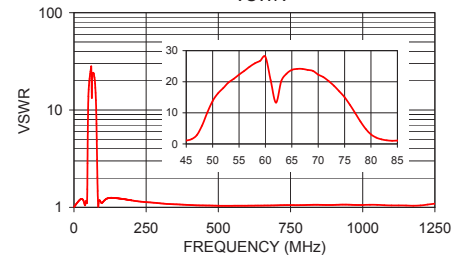
### +RoHS Compliant

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

BSF-C5468+  
INSERTION LOSS



BSF-C5468+  
VSWR



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[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 [sales@minicircuits.com](mailto:sales@minicircuits.com)

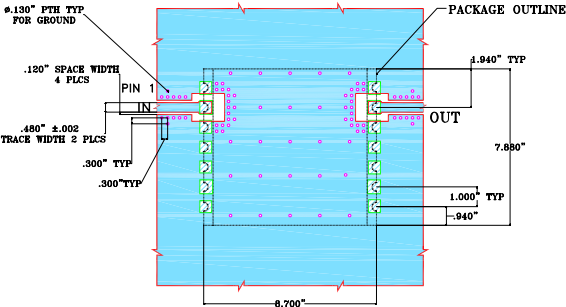
REV. A  
M160153  
BSF-C5468+  
EDU1281  
URJ/NY  
161230  
Page 2 of 3



Pin Connections

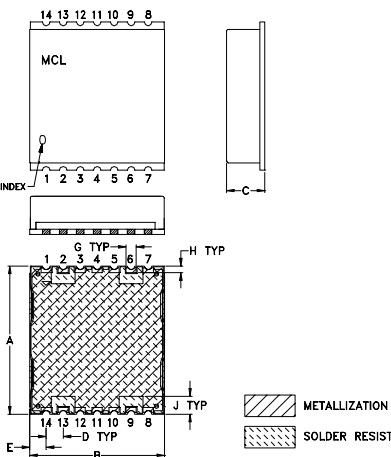
INPUT	2
OUTPUT	13
NOT CONNECTED	6,9
GROUND	1,3,4,5,7,8,10,11,12,14

Demo Board MCL P/N: TB-378  
Suggested PCB Layout (PL-347)

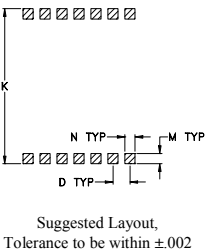


- NOTES:
1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .030"±.003". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Outline Drawing



PCB Land Pattern



Outline Dimensions ( inch )

A	B	C	D	E	F	G	H
.870	.800	.25	.100	.097	--	.060	.040
22.10	20.32	6.35	2.54	2.46	--	1.52	1.02
J	K	L	M	N	P	wt	
.105	.910	--	.060	.060	--	grams	
2.67	23.11	--	1.52	1.52	--	2.85	

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