

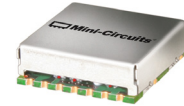
# Surface Mount Band Stop Filter

## BSF-C88108+

50Ω 88 to 108 MHz

### The Big Deal

- High rejection, 46 dB typical
- Stopband (88 to 108 MHz)
- Miniature shielded package



CASE STYLE: HU1186

### Product Overview

The BSF-C88108+ is stopband filter fabricated using SMT Technology. Covering 88 to 108 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, 46 dB typical	BSF-C88108+ 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

## BSF-C88108+

50Ω 88 to 108 MHz



CASE STYLE: HU1186

### Features

- High rejection, 46 dB typical
- Aqueous washable
- Miniature shielded package

### Applications

- FM radio
- Broadcast system
- Lab use

### Electrical Specifications at 25°C

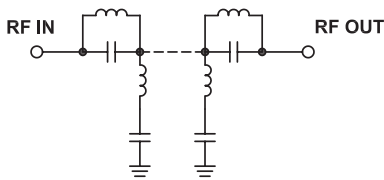
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band, Lower	Insertion Loss	DC-F1	DC - 66	-	0.5	1.5	dB
	VSWR	DC-F1	DC - 66	-	1.2	1.6	:1
Stop Band	Rejection	F4-F5	88 - 108	30	46	-	dB
	VSWR	F4-F5	88 - 108	-	10	-	:1
Pass Band, Upper	Insertion Loss	F2-F3	142-1300	-	0.7	1.5	dB
	VSWR	F2-F3	142-1300	-	1.2	1.6	: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.

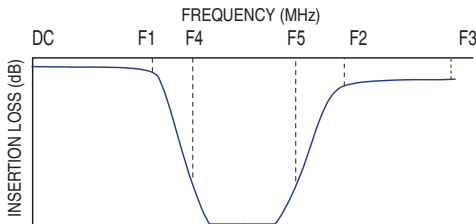
### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	0.03	1.01
40	0.17	1.21
66	0.49	1.10
75	1.45	1.06
78	4.44	2.61
80	11.00	6.53
82	20.32	11.53
84	31.75	15.39
88	54.77	20.45
97	56.92	9.90
100	55.83	24.83
108	52.30	21.73
114	29.06	13.60
118	13.74	7.00
120	8.24	4.09
124	2.67	1.44
142	0.64	1.03
500	0.19	1.04
1000	0.29	1.08
1300	0.39	1.08

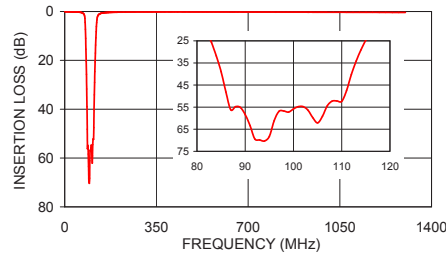
### Typical Frequency Response



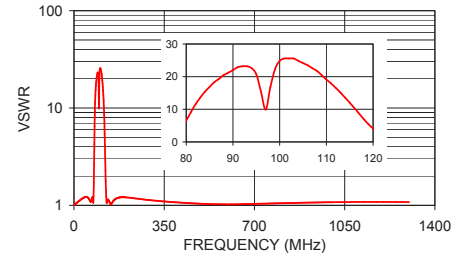
### +RoHS Compliant

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

BSF-C88108+  
INSERTION LOSS



BSF-C88108+  
VSWR



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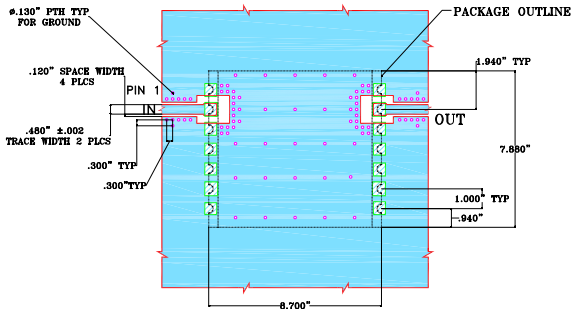
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REV. A  
M160153  
BSF-C88108+  
EDU1282  
URJ/NY  
161230  
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## Pin Connections

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)

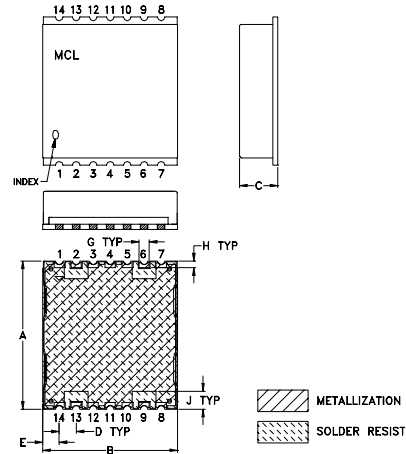


### NOTES:

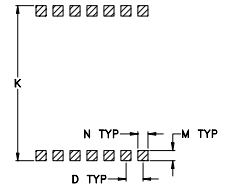
- TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .030" ±.003". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
- BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

## Outline Drawing



## PCB Land Pattern



Suggested Layout,  
Tolerance to be within ±.002

## Outline Dimensions ( inch / mm)

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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