

Surface Mount Band Stop Filter

BSF-C100+

50Ω 90.365 to 109.635 MHz

The Big Deal

- High rejection, 48 dB typical
- Stopband (90.365 to 109.635 MHz)
- Miniature shielded package



CASE STYLE: HU1186

Product Overview

The BSF-C100+ is stopband filter fabricated using SMT Technology. Covering 90.365 to 109.635 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, 48 dB typical	BSF-C100+ 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



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IF/RF MICROWAVE COMPONENTS

For detailed performance specs
& shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

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50Ω 90.365 to 109.635 MHz

BSF-C100+



CASE STYLE: HU1186
PRICE: \$39.95 ea. QTY (1-9)

Features

- High rejection, 48 dB typical
- Aqueous washable
- Miniature shielded package

Applications

- FM radio
- Broadcast system
- Lab use

Electrical Specifications at 25°C

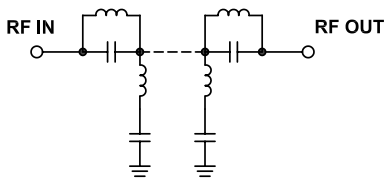
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band, Lower	Insertion Loss	DC-F1	DC - 70	-	0.6	dB
	VSWR	DC-F1	DC - 70	-	1.2	:1
Stop Band	Rejection	F4-F5	90.365 - 109.635	30	48	dB
	VSWR	F4-F5	90.365 - 109.635	-	13	:1
Pass Band, Upper	Insertion Loss	F2-F3	146 - 1500	-	0.8	dB
	VSWR	F2-F3	146 - 1500	-	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

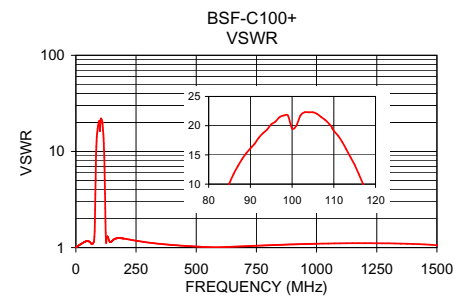
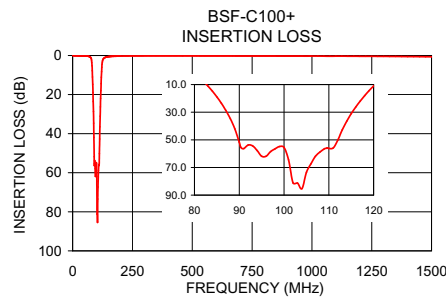


Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.000	0.03	1.01
50.000	0.21	1.17
70.000	0.56	1.10
78.000	1.71	1.49
80.000	3.47	2.48
83.000	11.01	7.25
86.000	23.53	12.80
88.000	34.64	15.13
90.365	55.46	17.22
100.000	55.54	16.26
109.635	55.81	19.98
113.000	42.76	16.56
115.000	31.07	13.81
117.000	21.99	10.50
122.000	6.06	2.57
125.000	2.70	1.17
146.000	0.63	1.14
500.000	0.20	1.03
1000.000	0.31	1.10
1500.000	0.66	1.06

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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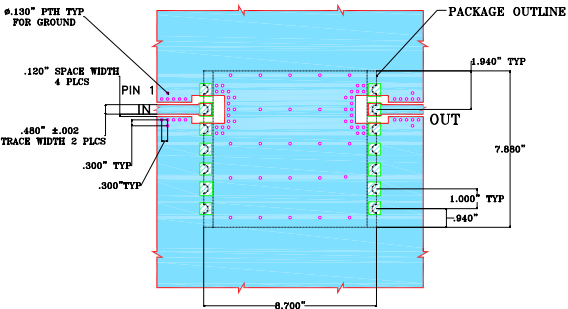
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REV. OR
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BSF-C100+
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Pin Connections

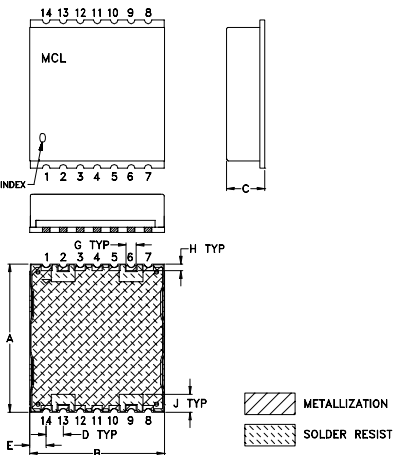
INPUT	2
OUTPUT	13
NOT CONNECTED	6,9
GROUND	1,3,4,5,7,8,10,11,12,14

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

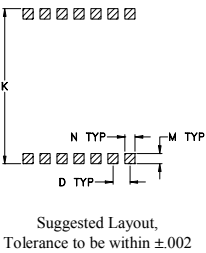


- NOTES:
- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030"±.003". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Outline Drawing



PCB Land Pattern



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	