

Surface Mount Band Stop Filter

BSF-C4768+

50Ω 47 to 68 MHz

The Big Deal

- High rejection, 46 dB typical
- Stopband (47 to 68 MHz)
- Miniature shielded package



CASE STYLE: HU1186

Product Overview

The BSF-C4768+ is stopband filter fabricated using SMT Technology. Covering 47 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, 46 dB typical	BSF-C4768+ 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



Surface Mount Band Stop Filter

BSF-C4768+

50Ω 47 to 68 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

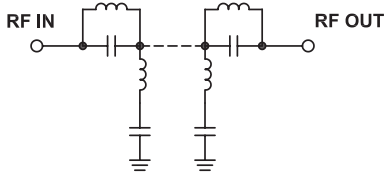
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band, Lower	Insertion Loss	DC-F1	DC - 32	-	0.4	1.5	dB
	VSWR	DC-F1	DC - 32	-	1.3	1.7	:1
Stop Band	Rejection	F4-F5	47 - 68	30	46	-	dB
	VSWR	F4-F5	47 - 68	-	9	-	:1
Pass Band, Upper	Insertion Loss	F2-F3	95-1200	-	0.6	1.5	dB
	VSWR	F2-F3	95-1200	-	1.3	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.

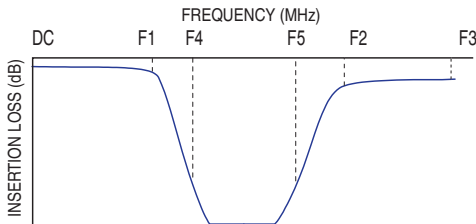
Functional Schematic



Typical Performance Data at 25°C

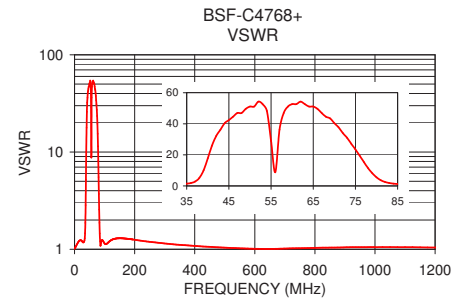
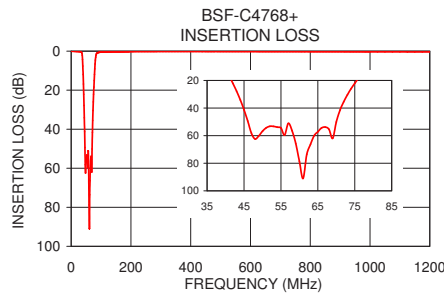
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	0.03	1.02
15	0.12	1.21
32	0.33	1.20
36	1.08	1.87
38	4.22	5.17
39	7.62	10.02
40	11.96	17.75
43	27.82	36.20
47	58.12	46.96
56	59.54	8.81
68	55.41	44.55
71	41.57	37.77
75	22.06	23.49
78	11.92	11.46
80	6.59	5.52
81	4.59	3.71
95	0.58	1.22
120	0.34	1.23
600	0.23	1.01
1200	0.42	1.04

Typical Frequency Response



+RoHS Compliant

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



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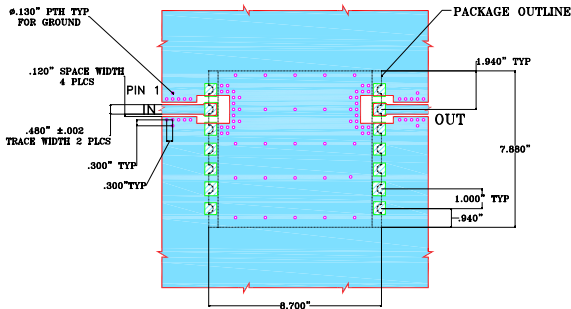
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REV. A
M160153
BSF-C4768+
EDU1280
URJ/NY
161230
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Pin Connections

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)

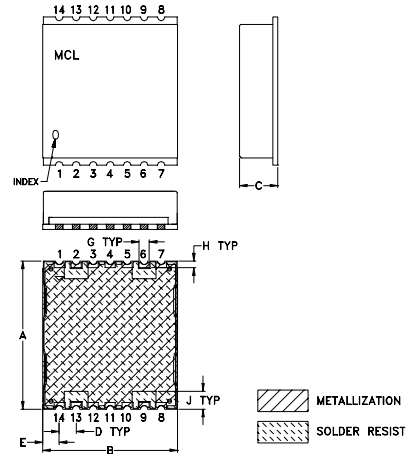


NOTES:

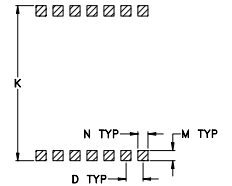
- TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .030" ±.003". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
- BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- 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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