# Surface Mount Band Stop Filter

## BSF-C140+

50Ω 127.25 to 152.75 MHz

## **The Big Deal**

- High rejection, 49 dB typical
- Good VSWR, 1.2:1 typical in passband
- Stopband (127.25 to 152.75 MHz)
- Miniature shielded package



CASE STYLE: HU1186

## **Product Overview**

The BSF-C140+ is stopband filter fabricated using SMT Technology. Covering 127.25 to 152.75 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, 49 dB typical	BSF-C140+ enables the filter to attenuate spurious signals and reject harmonics for broadband of frequencies.		
Good VSWR 1.2:1 typical in the pass- band	This filter maintains typical VSWR over a passband frequency range which provided good interface when used with other devices.		
Shielded package	Shielded package (Size of .087" x 0.80" x 0.25") reduced interface with and from the surrounding components.		

For detailed performance specs & shopping online see web site

## **Band Stop Filter**

50Ω 127.25 to 152.75 MHz

## BSF-C140+



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

Typ.

0.6

12

49

6

0.6

1.2

Max.

1.5

15

1.5

1.5

Unit

dB

:1

dB

:1

dB

:1

Min.

30

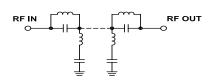
#### **Features**

- High rejection, 49 dB typical
- · Good VSWR 1.2:1 typical in passband
- · Aqueous washable
- · Miniature shielded package

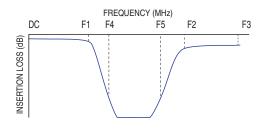
### **Applications**

- FM radio
- Receivers / Transmitters
- · Lab use

## Functional Schematic



## Typical Frequency Response



## + 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.

# Maximum Ratings Operating Temperature -40°C to 85°C

**Parameter** 

Pass Band, Lower

Pass Band, Upper

Storage Temperature RF Power Input

Stop Band

Insertion Loss

Insertion Loss

**VSWR** 

**VSWR** 

**VSWR** 

Rejection

Permanent damage may occur if any of these limits are exceeded

## Typical Performance Data at 25°C

Electrical Specifications at 25°C

Frequency (MHz)

DC - 96

DC - 96

127.25-152.75

127.25-152.75

210-1000

210-1000

F#

DC-F1

DC-F1

F4-F5

F4-F5

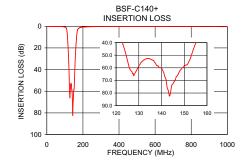
F2-F3

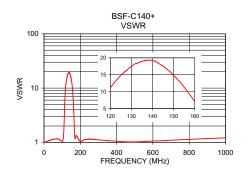
F2-F3

-55°C to 100°C

250 mW max.

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	0.02	1.01
25.00	0.07	1.07
60.00	0.14	1.15
84.00	0.28	1.13
96.00	0.50	1.05
105.00	1.07	1.11
111.00	3.70	2.31
113.00	6.67	3.73
116.00	13.94	7.05
120.00	27.38	11.09
122.00	36.05	12.71
127.25	64.73	15.96
140.00	60.33	19.11
152.75	52.23	13.09
157.00	32.20	9.69
160.00	22.15	7.05
170.00	3.68	1.23
210.00	0.55	1.07
500.00	0.21	1.02
1000.00	0.31	1.21







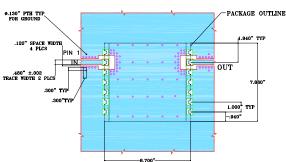
For detailed performance spec-& shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicipality.com

#### **Pin Connections**

INPUT	2	
OUTPUT	13	
NOT CONNECTED	6,9	
GROUND	1.3.4.5.7.8.10.11.12.14	

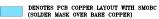
#### Demo Board MCL P/N: TB-378+ Suggested PCB Layout (PL-347)



- NOISS:

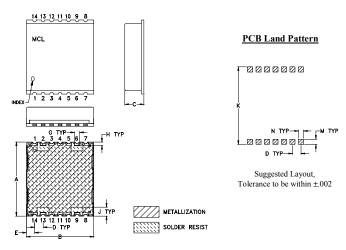
  1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030\*4.003\*. COPPER: 1/2 OZ. EACH SIDE.
  FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.

  2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.



DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

### **Outline Drawing**



## Outline Dimensions ( inch )

Н	G	F	E	D	С	В	Α
.040	.060		.097	.100	.25	.800	.870
1.02	1.52		2.46	2.54	6.35	20.32	22.10
wt		Р	N	М	L	K	J
grams			.060	.060		.910	.105
2.85			1.52	1.52		23.11	2.67



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