

# Surface Mount High Pass Filter

## SCHF-17+ SCHF-17

50Ω 18 to 200 MHz



CASE STYLE: YY161  
PRICE: \$15.95 ea. QTY. (1-9)

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

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

### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C

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

### Pin Connections

RF IN	1
OUTPUT	8
GROUND	2,3,4,5,6,7

### Features

- low pass band insertion loss
- custom models available

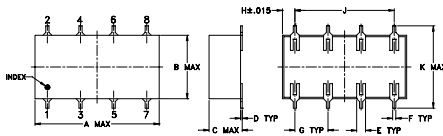
### Applications

- HF/VHF
- lab use
- transmitters/receivers

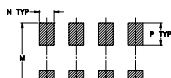
### High Pass Filter Electrical Specifications

STOP BAND (MHz)	f <sub>co</sub> , MHz Nom.	PASSBAND (MHz)	VSWR (:1)		POWER INPUT (W)
			Stopband	Passband	
(loss > 40 dB) (loss > 20 dB)	Typ.	(loss < 1 dB)	Typ.	Typ.	0.5
DC-9	9-13	16.5	18	1.25	0.5

### Outline Drawing



#### PCB Land Pattern



Suggested Layout,  
Tolerance to be within ±.002

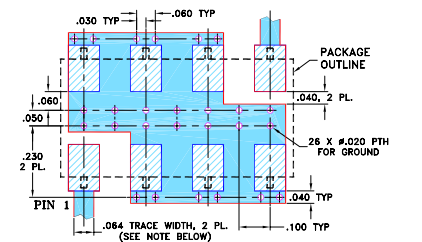
### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
0.75	0.38	0.28	0.01	0.05	0.02	0.2
19.05	9.65	7.11	0.25	1.27	0.51	5.08

H	J	K	M	N	P	wt
0.075	0.6	0.45	0.47	0.1	0.15	grams
1.91	15.24	11.43	11.94	2.54	3.81	1.60

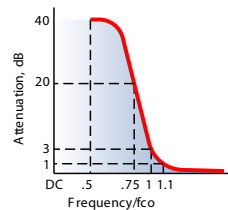
### Demo Board MCL P/N: TB-187+ Suggested PCB Layout (PL-049)



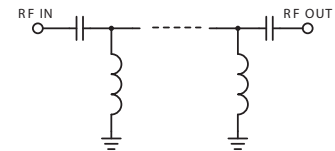
NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

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

### typical frequency response



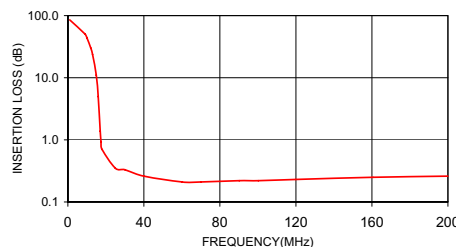
### electrical schematic



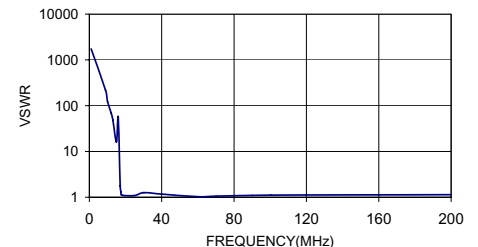
### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.99	85.38	1737.18
8.96	50.79	217.15
10.00	43.91	124.09
12.01	30.33	69.49
13.00	23.71	48.26
14.96	11.00	16.11
15.96	4.97	55.54
17.04	1.38	1.76
17.46	0.92	1.30
18.00	0.70	1.11
24.96	0.35	1.09
30.10	0.33	1.26
40.00	0.26	1.17
60.06	0.21	1.03
70.09	0.21	1.06
90.17	0.22	1.10
100.22	0.22	1.11
119.85	0.23	1.12
160.59	0.25	1.13
200.00	0.26	1.14

SCHF-17  
INSERTION LOSS



SCHF-17  
VSWR



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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](http://www.minicircuits.com/MCLStore/terms.jsp).

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