

# Surface Mount High Pass Filter

## SCHF-25

50Ω 27.5 to 200 MHz



CASE STYLE: YY161

### 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

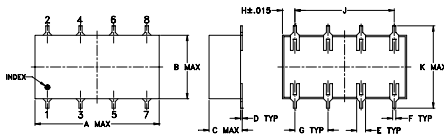
### Applications

- VHF
- lab use
- transmitters/receivers

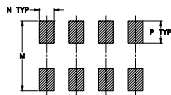
### High Pass Filter Electrical Specifications

STOP BAND (MHz)	f <sub>co</sub> , MHz Nom.	PASSBAND (MHz)	VSWR (:1)		POWER INPUT (W)
			Stopband	Passband	
(loss > 40 dB) (loss > 20 dB)	(loss 3 dB) Typ.	(loss < 1 dB)	Typ.	Typ.	0.5
DC-13	13-19	25	27.5-200	18 1.3	0.5

### Outline Drawing



#### PCB Land Pattern



Suggested Layout, Tolerance to be within ±0.02

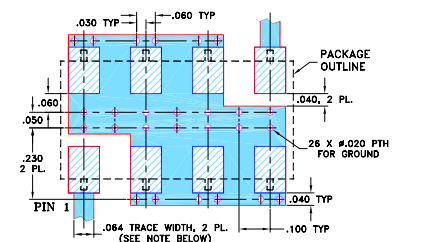
### Outline Dimensions (inch/mm)

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)

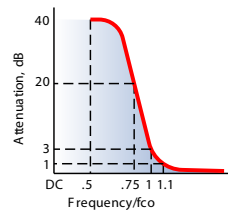


- NOTES:
1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
  - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

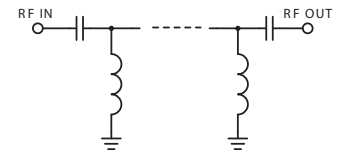
#### Notes

- 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-Circuit's 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-Circuit's website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

### typical frequency response



### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	97.10	0.00
6.00	87.20	0.00
7.90	79.30	0.00
9.30	72.10	0.00
12.00	58.60	4.00
13.00	53.80	4.00
15.10	44.30	7.00
16.20	39.50	8.00
18.30	30.50	0.10
19.00	27.60	0.20
20.40	21.60	0.20
21.80	15.70	0.50
22.50	12.70	0.70
25.00	3.40	4.60
68.80	0.20	39.60
90.60	0.20	25.50
112.50	0.20	22.40
156.30	0.30	20.60
178.10	0.30	20.10
200.00	0.30	19.70

