SXHP-48+

 50Ω 54 to 1000 MHz

The Big Deal

- Low insertion loss
- High rejection
- Miniature shielded package



Generic photo used for illustration purposes only CASE STYLE: HF1139

Product Overview

SXHP-48+ is a 50Ω high pass filter fabricated using SMT technology. This high pass filter covers from 54-1000 MHz. This filter is built with high Q capacitors and wire wound inductors for superior performance. It has repeatable performance across lots and consistent performance across temperature.

Key Features

Feature	Advantages		
Low insertion loss	Can be used in high performance applications.		
Good rejection	enables the filter to attenuate spurious signals and reject harmonics for broad band frequence.		
Small size, 0.44" X 0.74" X 0.27"	The small surface mount package enables the SXHP-48+		

Notes
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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/WCLStore/terms.jsp

High Pass Filter

 50Ω 54 to 1000 MHz

SXHP-48+



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Тур.

30

20

0.6

1.3

20

Max.

2

1.92

Unit

dB

٠1

dB

:1

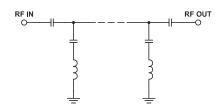
Features

- · Low insertion loss
- High rejection
- · Miniature shielded package

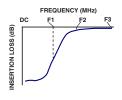
Applications

- SATCOM
- · Broadband fiber networks
- CATV
- Radio communications
- Receivers / transformer

Functional Schematic



Typical Frequency Response



+RoHS Compliant

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			
RF Power Input	0.5 W max.			

Parameter

VSWR

VSWR

Stop Band

Pass Band

Rejection Loss

Insertion Loss

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

Typical Performance Data at 25°C

Electrical Specifications at 25°C

F#

DC-F1

DC-F1

F2-F3

F2-F3

Frequency (MHz)

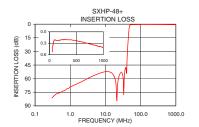
DC-42

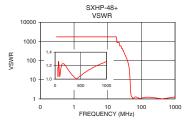
DC-42

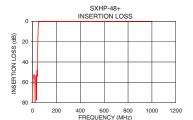
54-1000

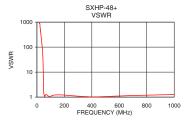
54-1000

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
0.3	81.29	1737.18	
1.0	69.17	1737.18	
5.0	56.16	1737.18	
10.0	52.34	1737.18	
35.0	53.59	157.93	
37.0	47.99	124.09	
40.0	53.90	78.97	
42.0	30.84	56.04	
43.0	24.24	44.55	
45.0	13.16	19.98	
47.0	4.64	4.99	
48.0	2.33	2.61	
49.0	1.30	1.71	
50.0	0.92	1.42	
51.0	0.76	1.33	
54.0	0.53	1.17	
65.0	0.35	1.25	
250.0	0.20	1.14	
600.0	0.26	1.11	
1000.0	0.41	1.26	









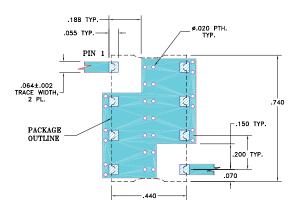
Notes

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Pad Connections

INPUT	1
OUTPUT	8
GROUND	2 3 4 5 6 7

Demo Board MCL P/N: TB-368 Suggested PCB Layout (PL-230)



NOTE:

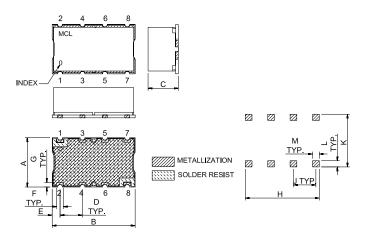
- 1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025"±.002". COPPER: 1/2 OZ. EACH SIDE.
 FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.



DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Outline Drawing



Outline Dimensions (inch)

G	F	E	D	С	В	Α
.040	.060	.07	.200	.27	.74	.44
1.02	1.52	1.78	5.08	6.86	18.80	11.18
wt		M	L	K	J	Н
grams		.060	.055	.470	.200	.660
3.0		1.52	1.40	11.94	5.08	16.76

Note: Please refer to case style drawing for details

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