

Coaxial High Pass Filter

SHP-48+

50Ω 48 to 2150 MHz

The Big Deal

- Low insertion loss
- High rejection
- Connectorized package



Generic photo used for illustration purposes only
CASE STYLE: FF56

Product Overview

SHP-48+ is a High pass filter in a connectorized package covering 48 to 2150 MHz. This filter can be used in SATCOM, CATV, Broadband Fiber Networks and Multiband radio systems. It has repeatable performance across production lots and consistent performance across temperature.

Key Features

Feature	Advantages
Low insertion loss	Can be used in high performance applications.
Good rejection	This enables the filter to attenuate spurious signals and reject harmonics for broad band frequency.
Connectorized package	The connectorized package is easy to interface with other devices and well suited for test setups.

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



Coaxial High Pass Filter

SHP-48+

50Ω 48 to 2150 MHz



Generic photo used for illustration purposes only

CASE STYLE: FF56

Connectors	Model
SMA-M/F	SHP-48+

Features

- Wide band, 48 MHz to 2150 MHz
- High rejection
- Connectorized package

Applications

- SATCOM
- Broadband Fiber Networks
- CATV
- Radio communications
- Receivers \ transmitters

Electrical Specifications at 25°C

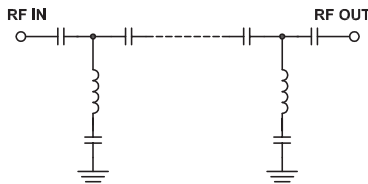
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Stop Band	Rejection Loss	DC-F1	DC-18	20	31	-	dB
	VSWR	DC-F1	DC-18	-	40	-	:1
Pass Band	Insertion Loss	F2-F3	48-2150	-	0.6	1.2	dB
	VSWR	F2-F3	48-2150	-	1.15	-	:1

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5 W.

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

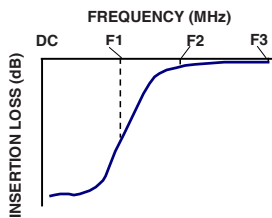
Functional Schematic



Typical Performance Data at 25°C

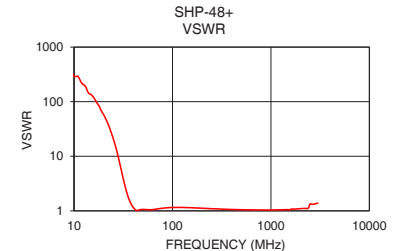
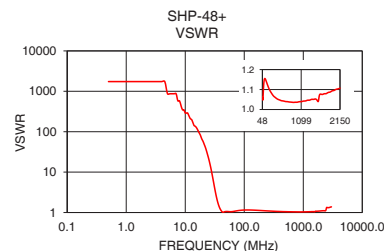
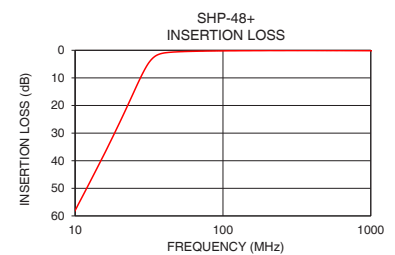
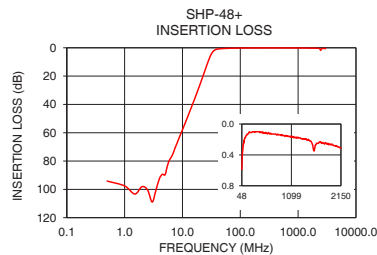
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
0.5	94.13	1737.18
5.5	83.29	868.59
8.5	64.96	434.30
12.0	49.88	217.15
18.0	31.26	82.73
24.0	17.08	26.33
28.0	9.38	10.07
31.0	5.06	4.54
34.0	2.54	2.32
39.0	1.08	1.23
48.0	0.59	1.06
57.0	0.43	1.05
63.0	0.37	1.06
74.0	0.30	1.10
96.0	0.23	1.15
150.0	0.15	1.14
340.0	0.10	1.07
1150.0	0.18	1.04
1900.0	0.26	1.09
2150.0	0.31	1.11

Typical Frequency Response



+RoHS Compliant

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



Notes

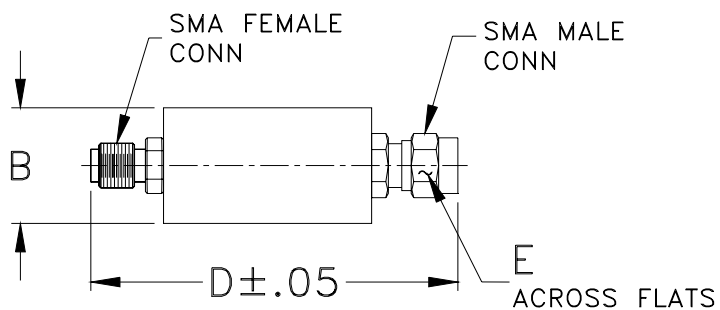
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- 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



Coaxial Connections

INPUT	SMA-Male
OUTPUT	SMA-Female

Outline Drawing



Outline Dimensions ($\frac{\text{inch}}{\text{mm}}$)

B	D	E	wt
0.43	1.70	0.312	grams
10.92	43.18	7.92	18.0

Note: Please refer to case style drawing for details

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

