

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.
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50Ω 48 to 2150 MHz

SHP-48+



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Connectors	Model
SMA-M/F	SHP-48+

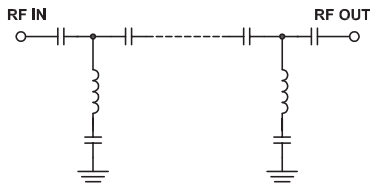
Features

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

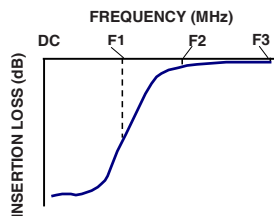
Applications

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

Functional Schematic



Typical Frequency Response



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.

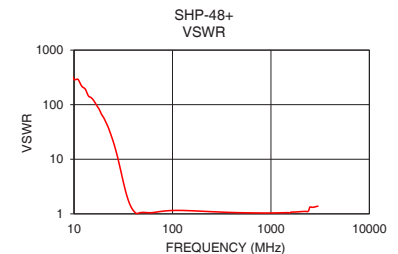
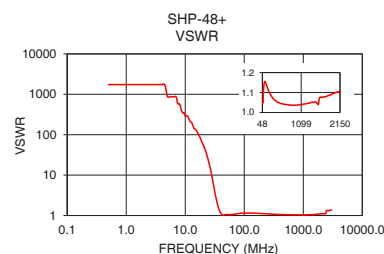
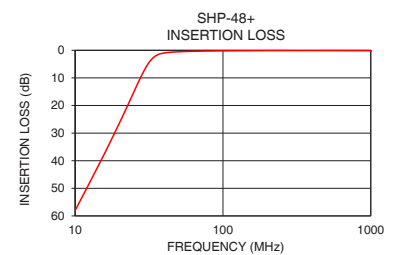
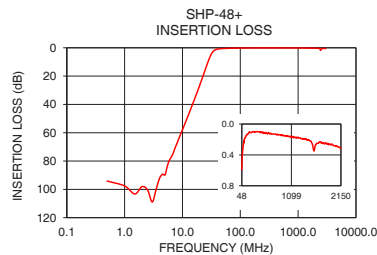
Permanent damage may occur if any of these limits are exceeded.

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

+RoHS Compliant

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



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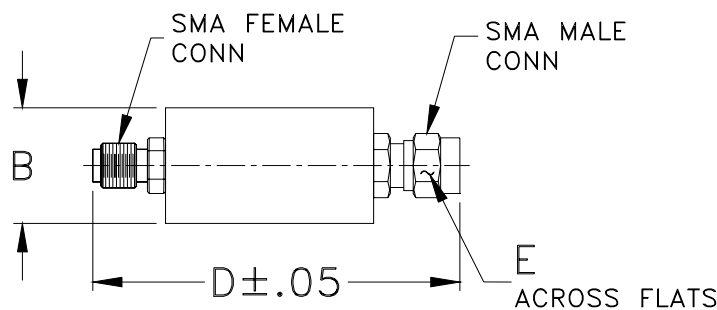
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Coaxial Connections

INPUT	SMA-Male
OUTPUT	SMA-Female

Outline Drawing



Outline Dimensions (^{inch}/_{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

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