

# Coaxial High Pass Filter

50Ω 41 to 800 MHz

## Maximum Ratings

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

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

## Features

- rugged shielded case
- other standard and custom SHP models available with wide selection of fco

## Applications

- lab use
- transmitters/receivers
- radio communications

# SHP-50+



Generic photo used for illustration purposes only

CASE STYLE: FF99

Connectors	Model
SMA	SHP-50+

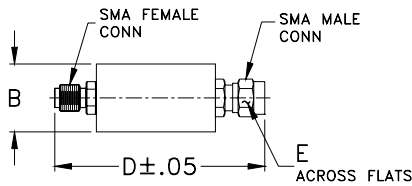
**+RoHS Compliant**

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

## High Pass Filter Electrical Specifications

STOPBAND (MHz)		fco (MHz) Nom.	PASSBAND (MHz)	VSWR (:1)	
(loss > 40 dB)	(loss > 20 dB)	(loss 3 dB)	(loss < 1 dB)	Stopband Typ.	Passband Typ.
DC-20	20-26	37	41-800	17	1.5

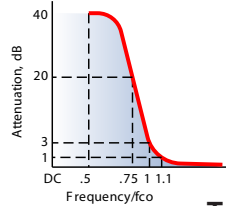
## Outline Drawing



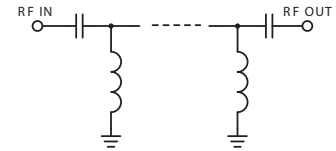
## Outline Dimensions (inch/mm)

B	D	E	wt
.67	1.98	.312	grams
17.02	50.29	7.92	42.0

## typical frequency response

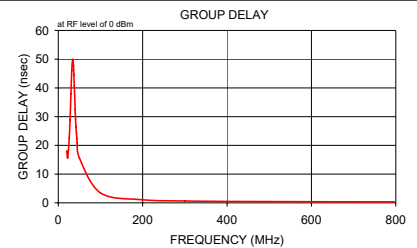
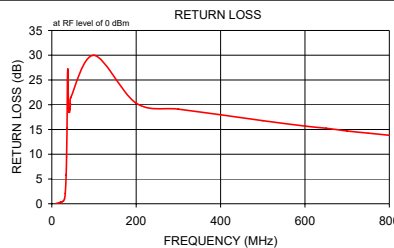
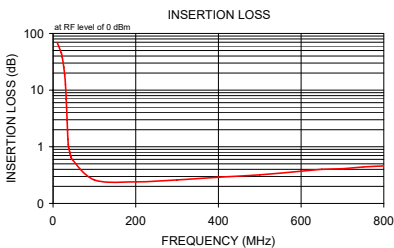


## electrical schematic



## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
10.00	69.20	3.81	0.15	20.00	18.03
20.00	45.38	0.93	0.39	22.00	15.59
22.00	38.53	1.25	0.46	24.00	18.34
24.00	31.83	1.18	0.49	26.00	22.61
26.00	25.35	1.28	0.57	28.00	28.85
28.00	18.94	1.39	0.70	30.00	37.79
30.00	12.65	1.53	1.08	32.00	46.09
32.00	6.90	1.45	2.21	34.00	49.90
34.00	2.95	0.88	5.90	35.00	49.53
35.00	1.94	0.57	9.57	36.00	47.70
36.00	1.35	0.34	15.32	37.00	44.59
37.00	1.09	0.20	25.05	38.00	40.68
38.00	0.94	0.11	27.33	39.00	36.49
39.00	0.89	0.08	21.46	40.00	32.54
40.00	0.82	0.05	19.28	41.00	29.16
41.00	0.77	0.04	18.56	42.00	26.41
42.00	0.72	0.03	18.59	43.00	24.22
43.00	0.69	0.02	19.15	44.00	22.42
44.00	0.65	0.03	20.27	45.00	20.92
45.00	0.61	0.02	21.55	50.00	15.63
100.00	0.26	0.01	30.08	100.00	3.44
200.00	0.24	0.01	20.42	200.00	1.07
300.00	0.26	0.01	19.21	300.00	0.65
400.00	0.29	0.01	18.08	400.00	0.50
500.00	0.32	0.01	16.88	500.00	0.44
600.00	0.37	0.01	15.79	600.00	0.40
650.00	0.40	0.01	15.36	650.00	0.38
700.00	0.41	0.02	14.80	700.00	0.36
750.00	0.44	0.02	14.36	750.00	0.36
800.00	0.46	0.02	13.93	800.00	0.36



## 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.
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