

# Coaxial High Pass Filter

## SHP-100+ SHP-100

50Ω 90 to 2000 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



CASE STYLE: FF99

Connectors	Model	Price	Qty.
SMA	SHP-100(+)	\$38.95 ea.	(1-9)

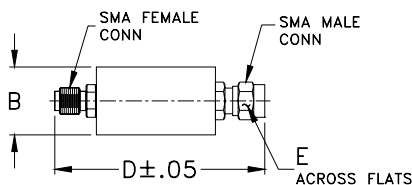
**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

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)	Stopband Typ. Passband Typ.
DC-40	40-55	82	17 1.5

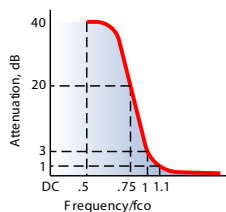
### Outline Drawing



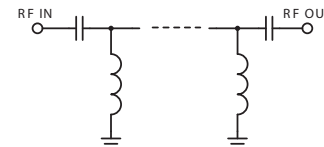
### Outline Dimensions (inch/mm)

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

### typical frequency response

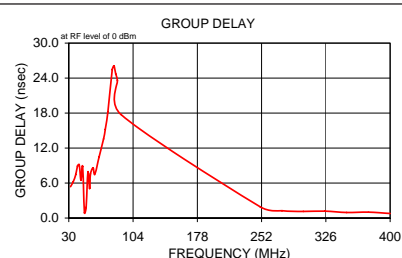
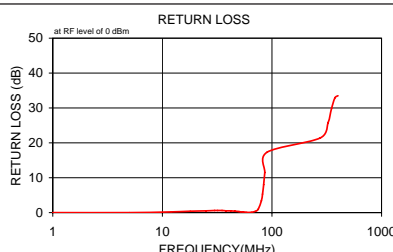


### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	$\sigma$			
0.30	89.11	2.62	0.00	31.00	8.89
8.00	99.03	2.59	0.00	39.00	6.70
15.00	99.15	9.35	0.00	46.00	3.14
23.00	85.95	3.83	0.01	54.00	7.36
31.00	70.59	1.33	0.02	62.00	10.03
39.00	57.79	1.32	0.04	70.00	15.90
46.00	47.39	1.59	0.07	71.00	17.05
54.00	35.98	1.77	0.14	72.00	18.27
62.00	25.00	2.07	0.29	73.00	19.57
70.00	14.11	2.38	0.78	74.00	20.91
74.00	8.90	2.38	1.65	78.00	25.23
78.00	4.58	1.93	3.80	82.00	24.35
80.00	3.05	1.49	5.61	84.00	22.20
82.00	1.97	1.01	7.85	90.00	15.92
83.00	1.59	0.78	9.08	195.00	2.32
85.00	1.07	0.43	11.60	415.00	0.70
90.00	0.60	0.07	17.02	525.00	0.55
195.00	0.20	0.02	20.29	635.00	0.47
305.00	0.26	0.03	16.03	745.00	0.44
635.00	0.23	0.02	20.93	1075.00	0.38
745.00	0.22	0.01	23.04	1180.00	0.42
855.00	0.24	0.01	25.13	1290.00	0.37
1075.00	0.21	0.01	28.66	1510.00	0.34
1180.00	0.19	0.01	29.41	1620.00	0.33
1290.00	0.23	0.01	29.30	1730.00	0.31
1400.00	0.24	0.02	28.38	1840.00	0.31
1510.00	0.24	0.02	27.07	1950.00	0.29
1730.00	0.28	0.03	23.89	2165.00	0.36
1840.00	0.27	0.03	22.20	2275.00	0.34
2060.00	0.21	0.02	18.99	2495.00	0.33



**Mini-Circuits®**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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