

# Coaxial High Pass Filter

## SHP-1000+

50Ω 1000 to 3000 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



Generic photo used for illustration purposes only

CASE STYLE: FF99

Connectors	Model
SMA	SHP-1000+

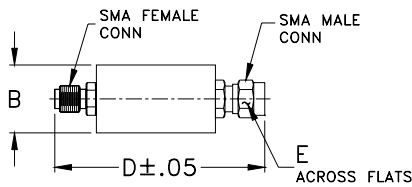
### +RoHS Compliant

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-550	550-720	900	1000-3000	17	1.9

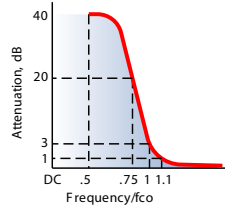
### Outline Drawing



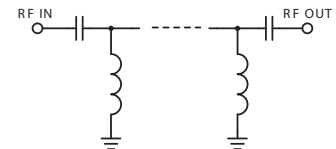
### Outline Dimensions (inch/mm)

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

### typical frequency response

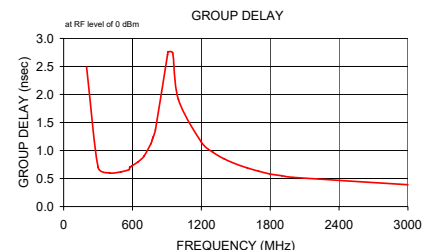
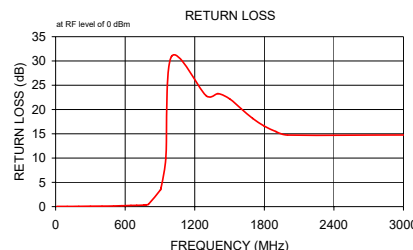
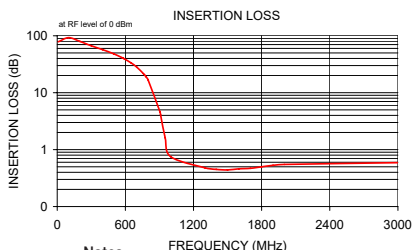


### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) $\bar{x}$	Insertion Loss (dB) $\sigma$	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
10.00	78.36	9.58	0.04	200.00	2.49
100.00	92.78	5.61	0.04	300.00	0.70
200.00	79.46	0.24	0.06	400.00	0.60
300.00	66.75	0.59	0.08	500.00	0.62
400.00	57.09	0.36	0.10	570.00	0.66
500.00	47.95	0.34	0.13	575.00	0.70
570.00	41.39	0.36	0.18	580.00	0.71
575.00	40.90	0.36	0.18	585.00	0.71
580.00	40.42	0.36	0.18	590.00	0.72
590.00	39.42	0.35	0.18	650.00	0.80
650.00	33.45	0.38	0.24	700.00	0.90
700.00	28.16	0.40	0.26	760.00	1.12
760.00	21.52	0.44	0.32	770.00	1.18
770.00	20.37	0.44	0.35	775.00	1.21
775.00	19.78	0.45	0.37	780.00	1.24
780.00	19.20	0.45	0.39	800.00	1.37
800.00	16.84	0.47	0.48	905.00	2.71
905.00	4.61	0.38	3.48	910.00	2.76
910.00	4.15	0.35	3.92	950.00	2.74
950.00	1.62	0.14	9.92	1000.00	1.91
1000.00	0.75	0.01	30.95	1200.00	1.15
1300.00	0.48	0.01	22.80	1300.00	0.97
1400.00	0.45	0.01	23.28	1400.00	0.85
1500.00	0.44	0.01	22.21	1500.00	0.76
1600.00	0.46	0.02	20.17	1600.00	0.69
1700.00	0.47	0.02	18.16	1700.00	0.63
1800.00	0.50	0.02	16.58	1800.00	0.58
1900.00	0.53	0.02	15.46	1900.00	0.55
2000.00	0.55	0.03	14.74	2000.00	0.52
3000.00	0.59	0.03	14.76	3000.00	0.39



### 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-Circuit's 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](http://www.minicircuits.com/MCLStore/terms.jsp)

