

Coaxial Bandpass Filter

SIF-40+

50Ω Constant Impedance 35 to 49 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

- low VSWR in pass- and stopbands, 1.3:1 typ
- rugged shielded case
- custom fo models available

Applications

- harmonic rejection
- lab use



Generic photo used for illustration purposes only

CASE STYLE: FF99

Connectors	Model
SMA	SIF-40+

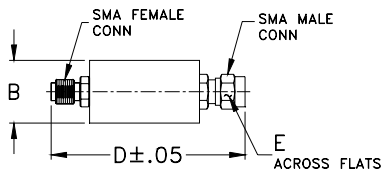
+RoHS Compliant

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

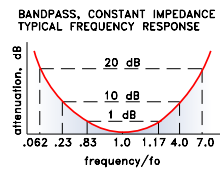
Bandpass Filter Electrical Specifications

CENTER FREQ. (MHz)	PASSBAND (MHz) (loss < 1 dB)	STOPBANDS		VSWR, 1.3:1 Typ. TOTAL BAND (MHz)
		(loss > 10 dB) at MHz	(loss > 20 dB) at MHz	
42	35-49	10 & 168	2.6 & 300	DC-400

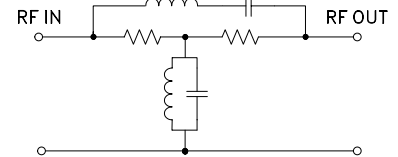
Outline Drawing



typical frequency response



electrical schematic

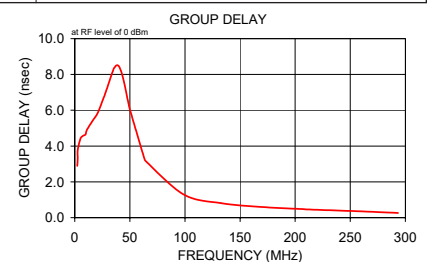
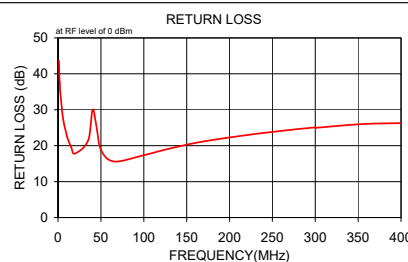
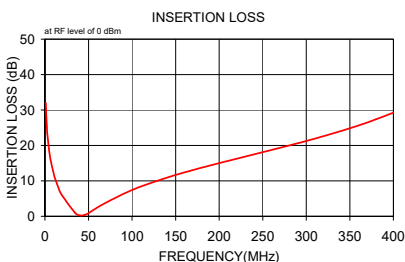


Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
1.0	31.97	0.1	43.7	2.3	2.895
1.3	29.62	0.1	41.1	2.6	3.319
1.6	27.72	0.1	39.1	2.7	3.755
2.0	26.20	0.1	37.6	5.2	4.422
2.3	24.90	0.1	36.1	7.5	4.574
2.6	23.77	0.1	34.9	9.9	4.649
3.0	22.54	0.1	33.7	11.0	4.904
5.3	17.56	0.1	28.5	16.1	5.402
7.7	14.41	0.1	25.3	20.9	5.852
10.0	12.05	0.1	23.0	26.2	6.700
11.0	11.21	0.1	22.2	27.1	6.840
15.3	8.20	0.1	19.5	35.1	8.288
19.7	5.92	0.1	17.8	36.3	8.399
35.0	0.86	0.1	21.4	37.6	8.498
40.3	0.23	0.1	30.0	39.6	8.488
44.7	0.31	0.1	25.5	41.7	8.249
50.0	0.88	0.1	18.9	43.2	7.937
65.0	3.17	0.1	15.6	45.4	7.393
99.3	7.37	0.2	17.3	47.0	6.910
133.7	10.43	0.2	19.4	48.7	6.395
168.0	12.93	0.3	21.1	50.4	5.956
212.0	15.76	0.3	22.7	63.1	3.323
256.0	18.46	0.4	24.0	64.2	3.167
300.0	21.25	0.5	25.1	98.9	1.296
301.0	21.32	0.5	25.0	132.6	0.812
320.8	22.67	0.6	25.4	168.9	0.599
340.60	24.13	0.7	25.8	207.7	0.474
360.40	25.67	0.9	26.1	211.3	0.462
380.20	27.40	1.1	26.2	255.6	0.363
400.00	29.24	1.4	26.3	293.4	0.264

Outline Dimensions (inch/mm)

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



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.
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