

Bandpass Filter

50Ω Elliptic Response 27 to 33 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 insertion loss, 1.5 dB max.
- good selectivity, 1.76 typ. 20 dB / 3dB BW ratio
- rugged shielded case

Applications

- high rejection applications
- image rejection
- IF signal processing

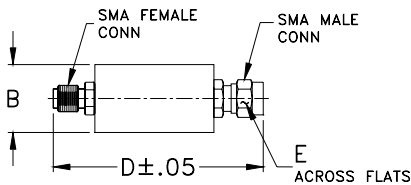
SBP-30+


CASE STYLE: FF99

Connectors	Model
SMA	SBP-30+

+RoHS Compliant

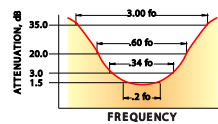
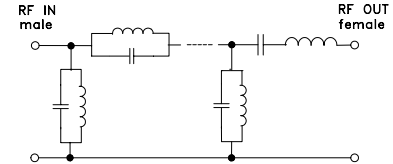
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Outline Drawing

Outline Dimensions (inch mm)

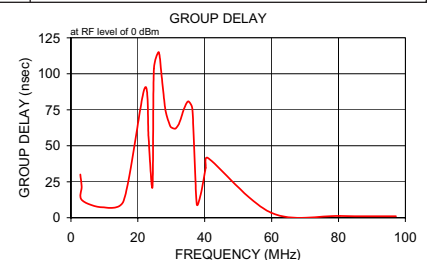
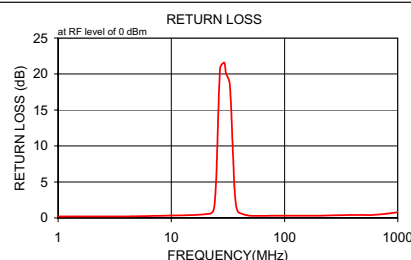
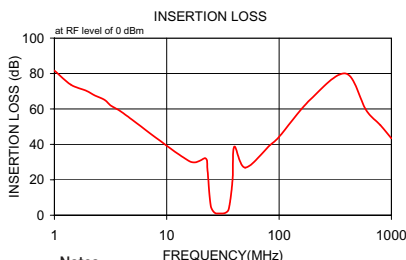
B	D	E	wt
.67	1.98	.312	grams
17.02	50.29	7.92	42.0

Bandpass Filter Electrical Specifications

CENTER FREQ. (MHz)	PASSBAND (MHz)	3dB BANDWIDTH (MHz)	STOPBANDS		VSWR (:1)	
	I.L. 1.5 dB Max.	Typ.	(I. loss > 20 dB) at MHz	(I. loss > 35 dB) at MHz	Passband Max.	Stopband Typ.
30	27-33	25-35	22 & 40	3.2 & 99-1000	1.7	16

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	81.68	9.6	0.2	2.8	30.059
1.4	73.69	2.1	0.2	3.2	21.884
1.9	70.39	1.8	0.2	3.3	12.226
2.3	67.50	1.2	0.2	9.6	7.216
2.8	65.09	0.9	0.2	15.8	11.923
3.2	61.70	1.3	0.2	22.0	89.768
4.0	58.09	0.6	0.2	23.2	56.479
16.0	30.42	0.6	0.4	23.6	40.798
22.0	32.26	2.3	0.6	24.4	22.806
23.0	26.30	1.7	0.8	24.8	103.619
23.7	15.68	1.1	1.2	26.2	115.164
24.3	8.44	1.0	2.5	27.1	99.025
25.0	3.86	0.6	6.3	28.0	78.962
27.0	1.28	0.1	20.8	28.5	72.223
29.3	1.02	0.1	21.6	29.5	64.660
30.5	1.02	0.1	20.0	30.0	62.760
32.8	1.16	0.1	18.6	31.1	61.836
35.0	2.37	0.3	8.8	31.6	62.724
36.0	4.69	0.5	4.5	32.2	64.652
37.3	11.24	0.9	1.7	32.7	67.765
38.7	21.64	1.2	0.9	33.9	76.095
40.0	38.75	2.0	0.7	35.1	80.917
50.0	26.83	0.5	0.3	36.3	75.838
82.7	39.42	0.4	0.3	37.6	9.558
99.0	43.92	0.6	0.3	38.9	16.978
190.0	65.36	2.3	0.3	40.3	34.601
392.5	80.00	3.9	0.4	41.0	41.413
595.0	59.40	2.2	0.4	59.9	3.448
797.5	50.83	1.8	0.6	80.4	1.230
1000.0	43.35	2.3	0.8	97.2	0.971


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.
 C. 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

