

Coaxial Bandpass Filter

ECO BBP-100+

50Ω 87 to 117 MHz

Features

- Very good rejection, 40 dB typ.
- Good VSWR, 1.3:1 typical in passband
- Connectorized package

Applications

- Transmitters / Receivers
- Harmonic rejection
- Test equipment
- Military Radio

Maximum Ratings

Operating Temperature -40°C to 85°C
Storage Temperature -55°C to 100°C.
RF Power Input 25 W max.

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

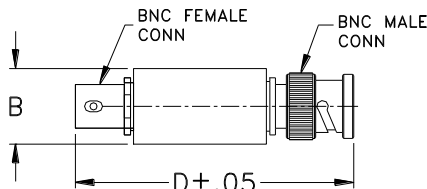
Coaxial Connections

PORT - 1 BNC-Male
PORT - 2 BNC-Female

Outline Dimensions (inch mm)

A B C D E Wt.
-- 0.57 - -- 2.59 - -- grams
- 14.47 - - 65.79 - - 40

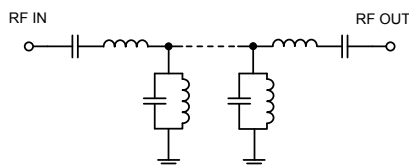
Outline Drawing



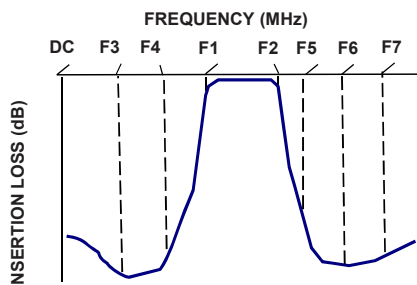
Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	F1-F2	87 - 117	--	2.2	3.0 dB
	VSWR	F1-F2	87 - 117	--	1.3	1.7 :1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 55	402	49	dB
	VSWR	F3-F4	55 - 66	0	29	dB
	VSWR	F4-F5	DC - 66	-	20	:1
Stop Band, Upper	Insertion Loss	F6-F7	143 - 175	204	28	dB
	VSWR	F5-F7	175 - 1500	0	50	dB
	VSWR	F5-F7	143-1500	-	20	:1

Functional Schematic



Typical Frequency Response



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (ns)
1	108.00	76258.91	87	32.32
20	101.38	7169.24	88	31.12
30	99.20	2804.52	89	30.05
40	74.21	1019.16	90	29.09
55	49.59	230.34	91	28.26
66	30.48	63.05	92	27.55
71	20.10	26.82	93	26.94
79	3.40	1.94	94	26.44
87	1.58	1.14	95	26.04
100	1.51	1.12	96	25.71
117	2.17	1.23	97	25.42
122	3.11	1.30	98	25.19
137	21.15	15.65	99	24.98
143	27.76	22.07	1001	24.79
175	49.76	47.26	1111	25.18
200	59.27	61.00	2113	25.47
300	76.14	81.76	1151	25.80
500	89.85	67.83	1611	26.68
10001	64.51	31.26	7	27.29
500	51.03	21.92		28.10

