

Coaxial Bandpass Filter

BBP-35B+

50Ω 24 to 46 MHz



Generic photo used for illustration purposes only
CASE STYLE: FF55

The Big Deal

- Very good rejection
- Very low insertion loss, 0.5 dB typ.
- Good VSWR (1.2:1 typical)
- Sharp roll-off
- Connectorized package

Product Overview

BBP-35B+ is a 50Ω bandpass filter in a connectorized package. The bandpass filter covers from 24 to 46 MHz, offering low insertion loss and good matching within the passband. It uses miniature high Q capacitors and wire welded inductors for high reliability. It has repeatable performance across production lots and consistent performance across temperature.

Key Features

Feature	Advantages
Sharp roll off	Sharp roll off due to elliptic response
Good VSWR, 1.2:1 typical over passband	This provides well matched input and output ports.
Connectorized package	Connectorized package is easy to interface with other devices and well suited for test setups.

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



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CASE STYLE: FF55
 Connectors Model
BNC BBP-35B+

50Ω 24 to 46 MHz

Features

- Very low insertion loss, 0.5 dB typ.
- Good VSWR, 1.2:1 typical in passband
- Sharp roll off due to elliptic response

Applications

- Transmitters / Receivers- IF stage
- Harmonic rejection
- Test equipment
- Military communication

Electrical Specifications at 25°C

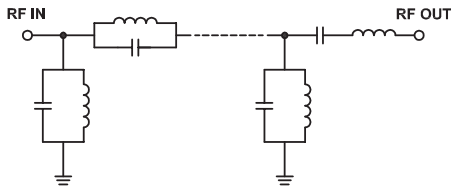
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	F1-F2	24 - 46	-	0.5	1.0	dB
	VSWR	F1-F2	24 - 46	-	1.2	1.5	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 5	35	44	-	dB
	VSWR	F3-F4	5 - 16	20	29	-	dB
		DC-F4	DC - 16	-	25	-	:1
Stop Band, Upper	Insertion Loss	F5-F6	73 - 81	20	27	-	dB
	VSWR	F6-F7	81 - 1000	35	39	-	dB
		F5-F7	73 - 1000	-	20	-	:1

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5 W max.

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

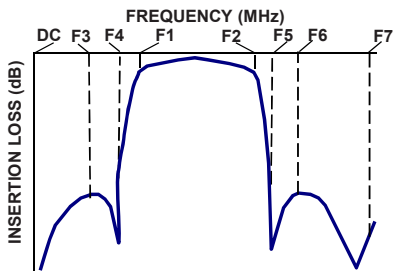
Functional Schematic



Typical Performance Data at 25°C

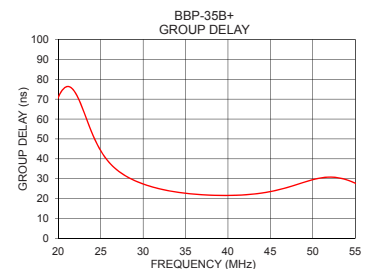
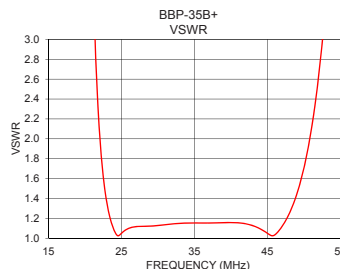
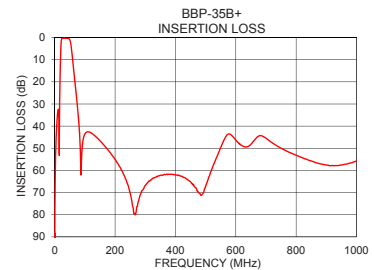
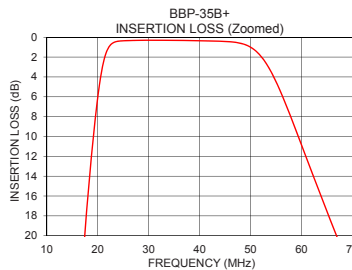
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (ns)
1	71.98	173.53	24	52.73
5	44.44	365.70	25	44.06
8	36.76	177.97	26	38.15
10	33.67	143.50	27	34.14
16	33.00	78.51	28	31.26
20	6.04	9.11	29	29.07
21	2.78	3.91	30	27.37
24	0.40	1.08	31	25.98
28	0.31	1.12	32	24.86
35	0.32	1.15	33	23.98
46	0.46	1.03	34	23.25
54	3.46	4.41	35	22.70
67	20.17	49.98	36	22.26
73	28.01	67.62	37	21.94
81	40.54	77.74	38	21.73
100	43.51	80.76	39	21.63
200	55.03	58.14	40	21.61
300	66.79	49.42	41	21.70
500	67.25	42.70	43	22.28
1000	55.74	46.27	46	24.48

Typical Frequency Response



+RoHS Compliant

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



Notes

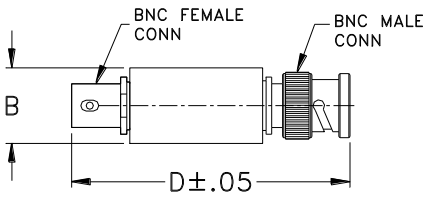
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Coaxial Connections

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

Outline Drawing



Outline Dimensions (inch / mm)

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

Note: Please refer to case style drawing for details

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