

Coaxial Bandpass Filter

BBP-140+

50Ω 130 to 150 MHz



Generic photo used for illustration purposes only
CASE STYLE: FF55

The Big Deal

- High rejection, 50 dB typ.
- Good VSWR, 1.3:1 typ.
- Fast roll-off
- Narrow bandwidth
- Connectorized package

Product Overview

BBP-140+ is a 50Ω bandpass filter in a connectorized package. This bandpass filter covers from 130 to 150 MHz, these units offer good matching within the passband and high rejection. This unit uses a 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
High rejection, 50 dB typ.	This enables the filter to attenuate spurious signals and reject harmonics for broad frequency band.
Good VSWR, 1.3:1 typ.	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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Connectors	Model
BNC	BBP-140+

Features

- High rejection, 50 dB typ.
- Fast roll-off
- Good VSWR, 1.3:1 typ.
- Rugged shielded case
- Connectorized package

Applications

- Receivers/Transmitters
- Wireless communication systems
- Radio link
- Test setup

Electrical Specifications at 25°C

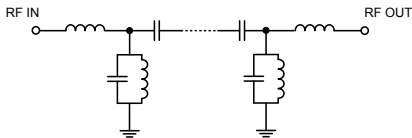
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center frequency	-	-	140	-	MHz
	Insertion Loss	F1-F2	130 - 150	2.6	3.5	dB
	VSWR	F1-F2	130 - 150	1.3	1.7	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 100	47	-	dB
	VSWR	DC-F4	DC - 110	20	-	:1
Stop Band, Upper	Insertion Loss	F5-F6	185 - 210	30	-	dB
	Insertion Loss	F6-F7	210 - 1000	50	-	dB
	VSWR	F7-F8	185 - 2000	20	-	:1

Maximum Ratings

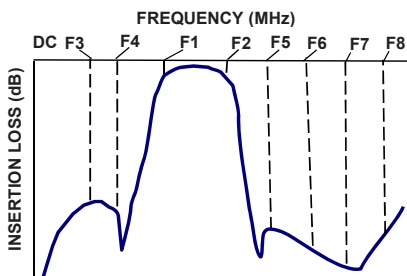
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5 W max.

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

Functional Schematic



Typical Frequency Response

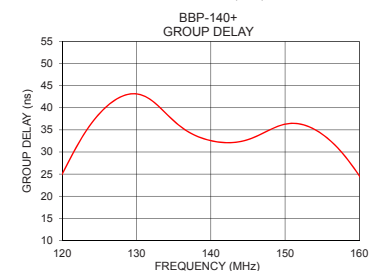
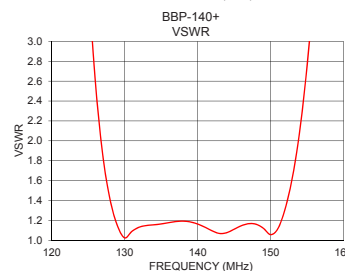
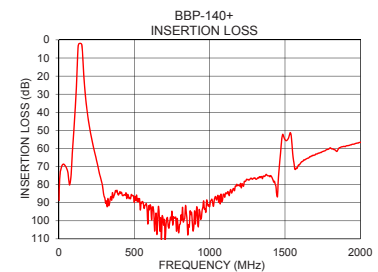
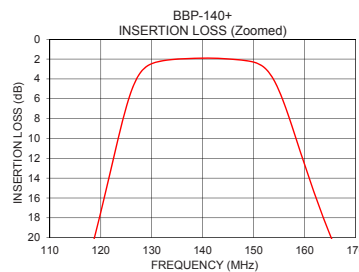


+RoHS Compliant

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

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (ns)
1	88.73	41.17	130	43.14
10	72.53	36.97	131	42.68
30	68.65	41.88	132	41.70
50	70.79	58.76	133	40.29
100	48.70	94.69	134	38.65
110	35.20	57.90	135	37.05
113	30.47	44.17	136	35.65
118	21.49	22.91	137	34.53
128	3.22	1.41	138	33.66
130	2.46	1.02	139	33.02
140	1.91	1.16	140	32.56
150	2.31	1.06	141	32.25
153	3.35	1.64	142	32.11
166	20.99	16.73	143	32.14
175	30.36	28.23	144	32.36
185	38.10	40.14	145	32.80
210	51.58	68.10	146	33.43
1000	92.21	0.00	147	34.23
1500	55.10	40.67	148	35.06
2000	56.64	31.20	150	36.29



Notes

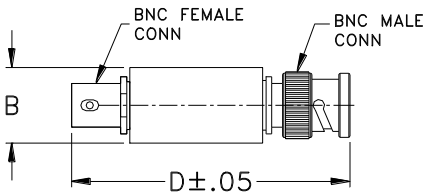
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Coaxial Connections

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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