Coaxial

Bandpass Filter

BBP-29+

50Ω 24 to 35 MHz



Generic photo used for illustration purposes only

CASE STYLE: FF55

The Big Deal

- Low insertion loss, 0.9 dB typ.
- Good VSWR 1.4:1 typ in passband
- Connectorized package
- Fast roll-off

Product Overview

BBP-29+ is a 50Ω bandpass filter in a connectorized package. The bandpass filter covers from 24 to 35 MHz, offering 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
Low insertion loss, 0.9 dB typ.	Low insertion loss enables usage in receivers and transmitters.
Good VSWR, 1.4:1 typical in 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
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Connectors	Model
BNC	BBP-29+

Features

- Good VSWR, 1.4:1 typical over passband
- Low insertion loss, 0.9 dB typ.
- Connectorized package

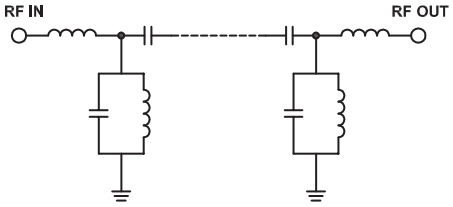
Applications

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

Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	F1-F2	24 - 35	-	0.9	1.5	dB
	VSWR	F1-F2	24 - 35	-	1.4	1.7	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 18	20	27	-	dB
	VSWR	DC-F3	DC - 18	-	50	-	:1
Stop Band, Upper	Insertion Loss	F4-F5	46 - 1600	20	27	-	dB
	VSWR	F4-F5	46 - 1600	-	26	-	:1

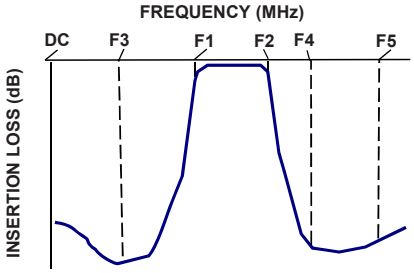
Functional Schematic



Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.25 W max.

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

Typical Frequency Response

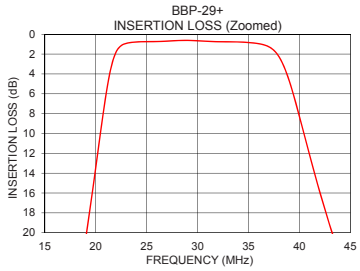


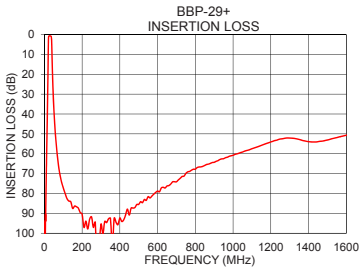
+RoHS Compliant

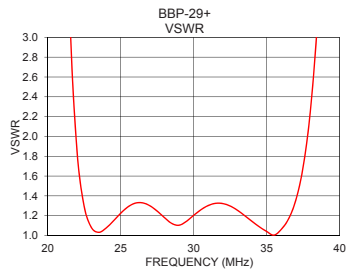
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

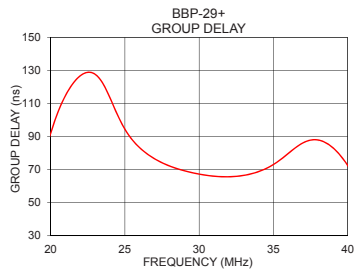
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (ns)
1	107.45	69514.92	24.0	113.42
10	71.59	1567.11	24.5	103.16
18	27.28	93.78	25.0	94.48
19	20.66	52.77	25.5	88.03
22	1.78	1.86	26.0	83.24
24	0.78	1.08	26.5	79.53
26	0.74	1.33	27.0	76.57
29	0.62	1.10	27.5	74.18
33	0.76	1.25	28.0	72.25
35	0.84	1.04	28.5	70.66
39	4.73	4.70	29.0	69.34
44	22.50	47.38	29.5	68.23
46	28.01	65.53	30.0	67.32
60	52.05	154.95	30.5	66.57
100	77.11	231.92	31.0	66.03
300	95.48	191.42	31.5	65.72
500	85.49	105.09	32.0	65.68
600	78.79	81.50	32.5	65.95
1000	60.78	36.98	33.0	66.52
1600	50.68	12.37	35.0	73.12









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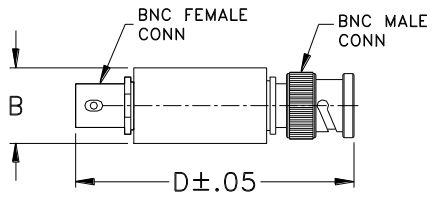
Coaxial Connections

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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