

Coaxial Bandpass Filter

ZABP-16+

50Ω 3 to 30 MHz

The Big Deal

- Low insertion loss, 1.5 dB typical
- Good VSWR, 1.43:1 typical
- High rejection
- Fast roll-off
- Connectorized package



CASE STYLE: UU1842

Product Overview

ZBPF-16+ is a 50Ω bandpass filter in a rugged connectorized package covering 3 to 30 MHz. These units offers good matching within the passband and high rejection. This filter has miniature high Q capacitors and wire welded inductors for high reliability. It has repeatable performance across lots and consistent performance across temperature

Key Features

Feature	Advantages
Fast roll-off	Wide bandwidth filter with fast-roll off, which increases selectivity on the adjacent channel.
Good matching and low loss in pass band	This filter has good matching and low loss in the pass band
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: UU1842
 Connectors Model
SMA-MF ZABP-16+

Features

- Low insertion loss, 1.5 dB typical
- Good VSWR, 1.43:1 typical
- High rejection
- Fast roll-off
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Applications

- CATV networks
- Aerospace and defence
- Digital radio networks

Electrical Specifications at 25°C

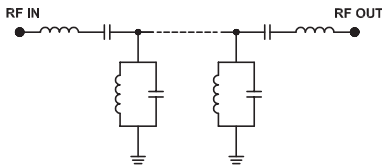
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	16	-	MHz
	Insertion Loss	F1-F2	3-30	1.50	3.00	dB
	VSWR	F1-F2	3-30	1.43	2.32	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 1.4	20	-	dB
	VSWR	DC-F3	DC - 1.4	-	20	:1
Stop Band, Upper	Insertion Loss	F4-F5	35-1600	20	32	dB
	VSWR	F4-F5	35-1600	-	20	:1

Maximum Ratings

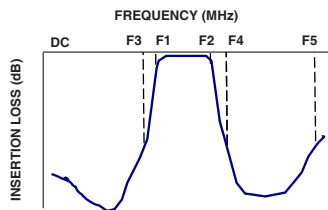
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5 W max.

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

Functional Schematic



Typical Frequency Response

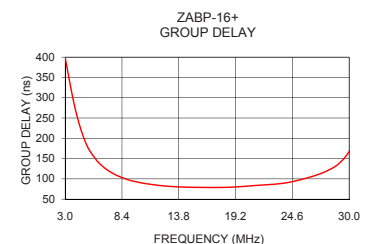
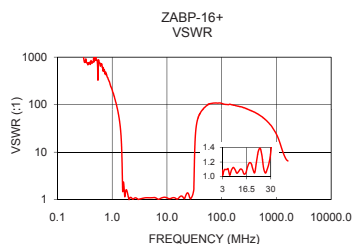
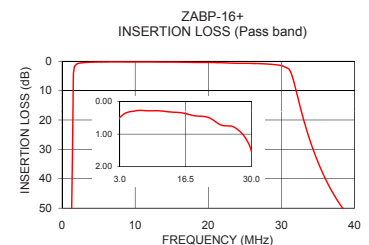
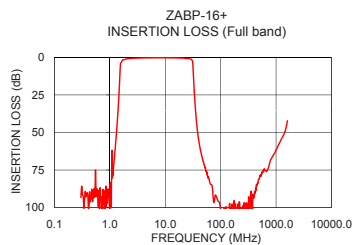


Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
0.30	93.23	976.09	3.00	399.61
0.50	88.76	1037.72	4.00	268.38
1.00	94.61	202.49	5.00	186.50
1.20	67.76	97.76	6.00	145.49
1.40	35.93	35.24	8.00	107.59
1.43	30.38	27.55	10.00	91.53
1.48	19.99	14.58	12.00	83.85
1.52	10.48	5.13	14.00	80.14
1.62	3.13	2.27	16.00	79.14
3.00	0.49	1.01	18.00	79.08
16.00	0.36	1.05	20.00	81.67
30.00	1.54	1.34	22.00	85.43
31.20	3.43	2.19	23.00	87.22
32.00	9.98	8.25	24.00	90.34
33.10	20.51	22.25	25.00	95.65
34.40	30.51	35.46	26.00	102.55
35.00	34.37	40.03	27.00	110.41
500.00	80.16	59.46	28.00	121.17
1000.00	61.65	23.96	29.00	137.25
1600.00	42.23	6.62	30.00	167.56

+RoHS Compliant

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



Notes

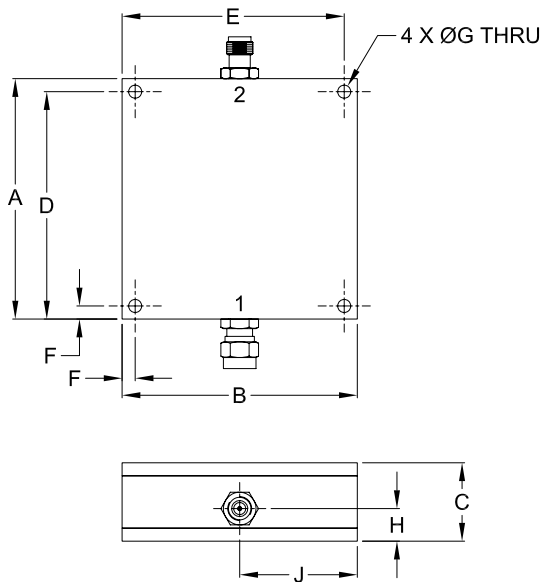
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Coaxial Connections

INPUT	SMA-MALE
OUTPUT	SMA-FEMALE

Outline Drawing



Outline Dimensions ($\frac{\text{inch}}{\text{mm}}$)

A	B	C	D	E
2.300	2.250	.750	2.175	2.125
58.42	57.15	19.05	55.25	53.98
F	G	H	J	wt.
.125	.125	.312	1.125	grams
3.18	3.18	7.93	28.58	124

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