

# 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.  
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### Features

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### Applications

- CATV networks
- Aerospace and defence
- Digital radio networks

Connectors	Model	Price	Qty.
SMA-MF	ZABP-16+	\$79.95 ea.	(10)

CASE STYLE: UU1842

### Electrical Specifications at 25°C

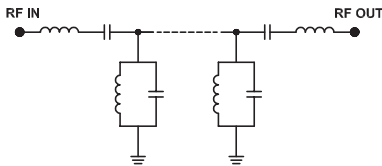
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
<b>Pass Band</b>	Center Frequency	-	-	16	-	MHz
	Insertion Loss	F1-F2	3-30	1.50	3.00	dB
	VSWR	F1-F2	3-30	1.43	2.32	:1
<b>Stop Band, Lower</b>	Insertion Loss	DC-F3	DC - 1.4	20	-	dB
	VSWR	DC-F3	DC - 1.4	-	20	:1
<b>Stop Band, Upper</b>	Insertion Loss	F4-F5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

### Maximum Ratings

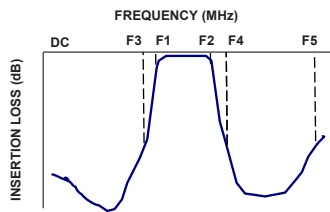
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5 W max.

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

### Functional Schematic



### Typical Frequency Response

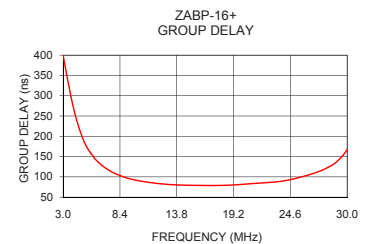
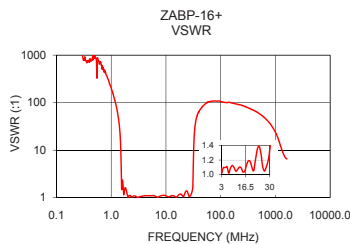
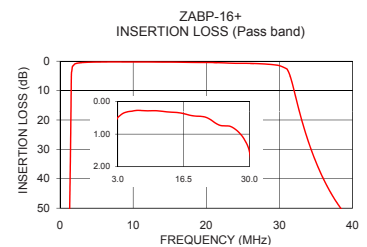
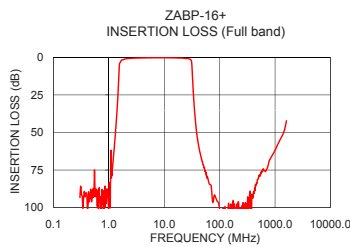


### Typical Performance Data at 25°C

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

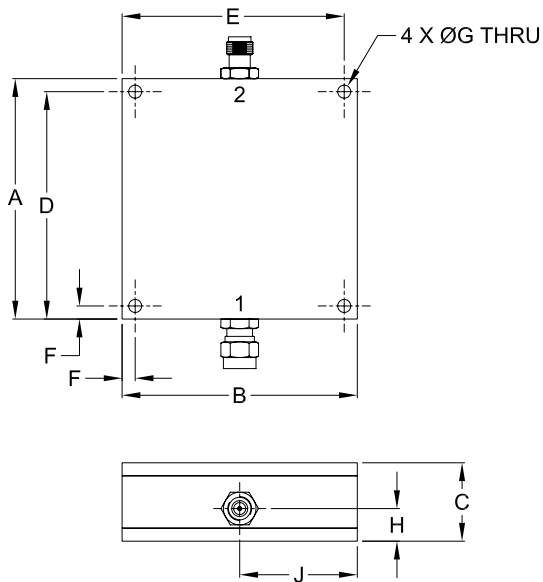
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## Coaxial Connections

INPUT	SMA-MALE
OUTPUT	SMA-FEMALE

## Outline Drawing



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

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

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