

Coaxial Bandpass Filter

ZFBP-400K+

50Ω 0.35 to 0.45 MHz



CASE STYLE: H16

The Big Deal

- Very low frequency bandpass filter
- Extended stopband all the way up to 200 MHz
- Connectorized package

Product Overview

ZFBP-400K+ is a 50Ω bandpass filter. This is built into a rugged connectorized package of size 1.25" x 1.25" x 0.75". This offers very good matching in passband and excellent stopband rejection. This is suitable for semiconductor processing equipment and other instrumentation applications for low frequency RF and signal processing.

Key Features

Feature	Advantages
Good passband insertion loss	Low insertion loss suitable for high performance application.
Sharp roll-off	Excellent near band rejection.
Extended stopband rejection	Spurious rejection and avoids using additional filters.



For detailed performance specs
& shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine  Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

Coaxial Bandpass Filter

ZFBP-400K+

50Ω 0.35 to 0.45 MHz



CASE STYLE: H16

Features

- High Stopband rejection
- Sharp roll-off
- Connectorized package

Connectors	Model	Price	Qty.
SMA-Female	ZFBP-400K-S+	\$79.95 ea.	(1-9)
BRACKET (OPTION "B")		\$5.00 ea.	(1-9)

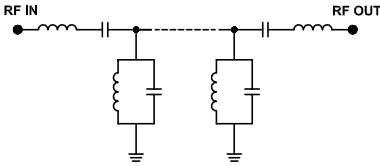
Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Center Frequency	—	—	0.4	—	MHz	
	Insertion Loss	F1-F2	0.35 - 0.45	—	1.1	3.0	dB
	VSWR	F1-F2	0.35 - 0.45	—	1.5	2.0	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 0.18	20	33	—	dB
	VSWR	DC-F3	DC - 0.18	—	67	—	:1
Stop Band, Upper	Insertion Loss	F4-F5	0.8 - 200	20	34	—	dB
	VSWR	F4-F5	0.8 - 200	—	19	—	:1

Applications

- Harmonic rejection
- Instrumentation
- Industrial processing equipments
- Lab use

Functional Schematic



Maximum Ratings

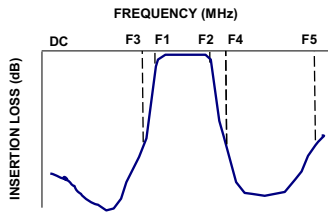
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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

Typical Performance Data at 25°C

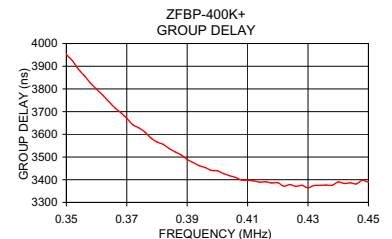
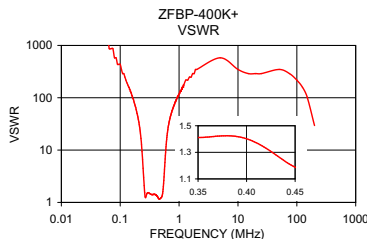
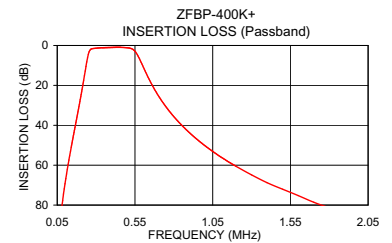
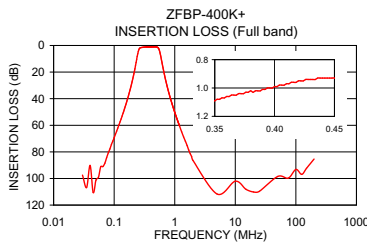
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
0.100	69.34	434.30	0.350	3952.77
0.180	34.59	69.49	0.352	3924.83
0.200	26.28	42.38	0.354	3886.64
0.225	15.16	16.72	0.356	3857.77
0.240	8.25	6.61	0.358	3825.18
0.255	3.22	2.10	0.400	3439.26
0.275	1.61	1.32	0.416	3390.83
0.350	1.09	1.41	0.420	3386.64
0.400	0.99	1.40	0.424	3378.61
0.450	0.93	1.19	0.426	3371.04
0.525	1.51	1.49	0.430	3364.52
0.560	3.96	3.59	0.432	3374.76
0.585	7.65	7.80	0.434	3375.23
0.625	14.37	18.90	0.436	3376.39
0.800	35.65	66.82	0.436	3376.39
1.200	60.56	173.72	0.438	3375.58
2.000	86.38	347.44	0.440	3390.13
50.000	98.50	347.44	0.442	3383.26
100.000	93.23	217.15	0.444	3386.29
200.000	85.40	29.46	0.450	3390.13

Typical Frequency Response



+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine [minicircuits.com](http://www.minicircuits.com) Provides ACTUAL Data Instantly at minicircuits.com

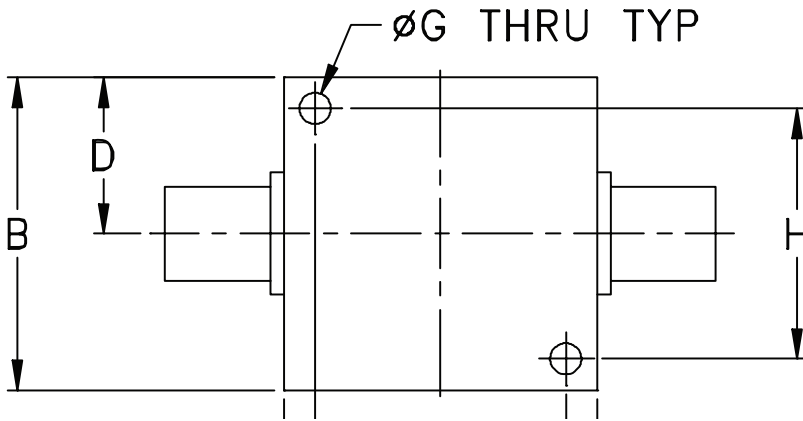
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuits' applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

Coaxial Connections

INPUT	SMA-FEMALE
OUTPUT	SMA-FEMALE

Outline Drawing

STANDARD



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.000	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40
J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.750	.06	grams
--	--	3.18	42.88	55.37	19.05	1.52	70.0



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.