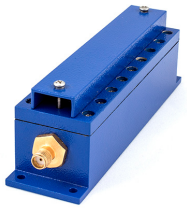
Cavity

Bandpass Filter

ZVBP-4300+

50Ω 4250 to 4350 MHz



CASE STYLE: ME1656

The Big Deal

- Low insertion loss, 1 dB typical
- Good VSWR, 1.3:1 typical
- High rejection
- Fast roll-off
- Connectorized package

Product Overview

ZVBP-4300+ is a 50Ω cavity filter for C band. Frequency band of this filter is used in Aviation/Aeronautical, broad band and passive sensors (satellite) applications.

Key Features

Feature	Advantages
Narrow band width	ZVBP-4300+ is narrow bandwidth filter. 2.33% band width
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.

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CASE STYLE: ME1656

Connectors	Model
SMA-F	ZVBP-4300-S+

Features

- Low insertion loss, 1 dB typical
- Good VSWR, 1.3:1 typical
- High rejection
- Fast roll-off
- Connectorized package

Applications

- Aviation/Aeronautical
- Broadband
- Passive sensors (satellite)

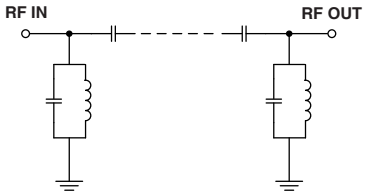
Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	-	4300	-	MHz
	Insertion Loss	F1-F2	4250-4350	-	1	1.5	dB
	VSWR	F1-F2	4250-4350	-	1.3	1.43	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 4140	20	29	-	dB
	VSWR	DC-F3	DC - 4140	-	20	-	:1
Stop Band, Upper	Insertion Loss	F4-F5	4480-8000	20	29	-	dB
	VSWR	F4-F5	4480-8000	-	20	-	:1

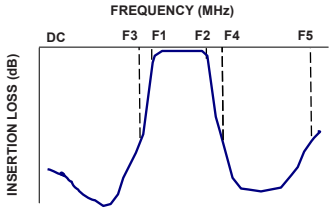
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	10 W max.

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

Functional Schematic



Typical Frequency Response



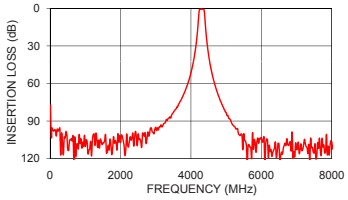
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
10	77.25	1737.18	4250	8.28
500	112.86	133.63	4254	7.74
1500	107.49	193.02	4260	7.12
3600	79.00	108.58	4264	6.83
4140	30.22	66.82	4270	6.53
4180	20.13	43.44	4276	6.36
4228	3.52	4.08	4280	6.27
4232	2.49	2.95	4284	6.20
4250	0.76	1.08	4290	6.10
4300	0.65	1.09	4296	6.04
4350	0.75	1.24	4300	6.00
4380	2.50	2.85	4304	5.98
4384	3.51	3.90	4310	5.98
4430	20.02	35.46	4316	6.01
4470	30.69	52.65	4320	6.06
4480	32.91	56.04	4324	6.12
4700	62.88	86.86	4330	6.22
5500	100.21	91.43	4340	6.45
7000	112.78	124.09	4346	6.68
8000	106.65	173.72	4350	6.89

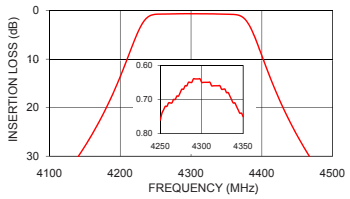
+RoHS Compliant

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

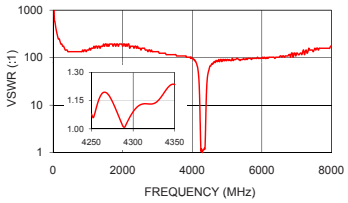
ZVBP-4300+
INSERTION LOSS (Full band)



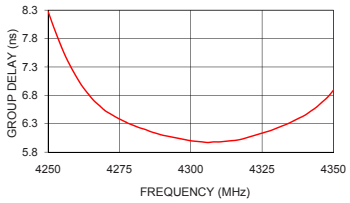
ZVBP-4300+
INSERTION LOSS (Pass band)



ZVBP-4300+
VSWR



ZVBP-4300+
GROUP DELAY



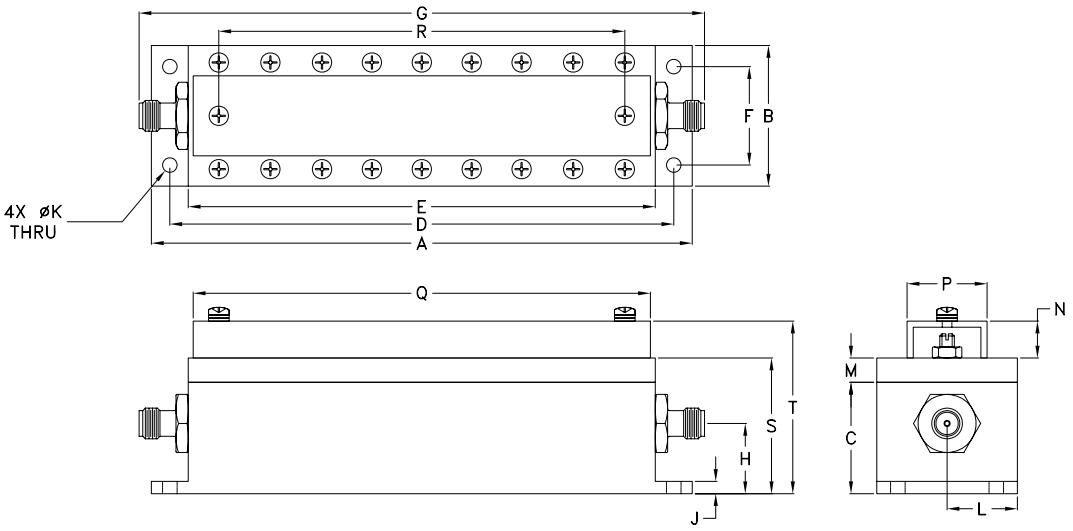
Notes

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

Coaxial Connections

INPUT	SMA-FEMALE
OUTPUT	SMA-FEMALE

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H	J	K
4.396	**1.143**	**.906**	**4.096**	**3.796**	**.800**	**4.596**	**.571**	**.100**	**.118**
111.66	29.03	23.01	104.04	96.42	20.32	116.74	14.50	2.54	3.00

L	M	N	P	Q	R	S	T		Wt.
.572	**.197**	**.300**	**.650**	**3.716**	**3.300**	**1.103**	**1.403**		grams
14.53	5.00	7.62	16.51	94.39	83.82	28.02	35.64		160