Cavity

Bandpass Filter

ZVBP-2300A+

50Ω 2200 to 2400 MHz

CASE STYLE: QJ2293

The Big Deal

- Low insertion loss, 0.5 dB typical
- Broad stopband performance up to 8 GHz
- Fast roll-off
- Connectorized package
- Small size

Product Overview

ZVBP-2300A+ is a 50Ω cavity filter for S band. Frequency band of this filter is used in fixed and mobile communication network applications.

Key Features

Feature	Advantages
Low loss in passband	This filter has low loss in passband
Sharp rejection	This filter has sharp rejection in transition region due to higher order design
Broad stopband performance	This filter has broad stopband performance up to 8 GHz
Connectorized package and small size	Connectorized package is easy to interface with other devices and well suited for test setups. Package size is small

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Connectors	Model
SMA-F	ZVBP-2300A-S+

Features

- Low insertion loss, 0.5 dB typical
- Broad stopband performance up to 8 GHz
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Applications

- Fixed and mobile communication network
- Satellite communication

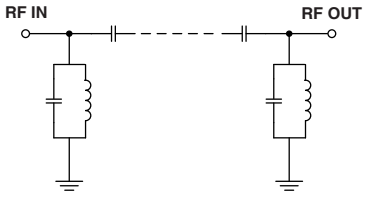
Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	-	2300	-	MHz
	Insertion Loss	F1-F2	2200-2400	-	0.5	1.0	dB
	VSWR	F1-F2	2200-2400	-	1.34	1.5	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 2000	30	40	-	dB
	VSWR	DC-F3	DC - 2000	-	20	-	:1
Stop Band, Upper	Insertion Loss	F4-F5	2550-8050	30	40	-	dB
	VSWR	F4-F5	2550-8050	-	20	-	:1

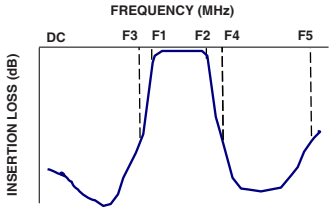
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	15 W

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

Functional Schematic



Typical Frequency Response

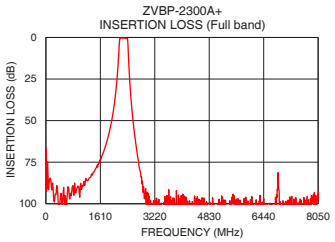


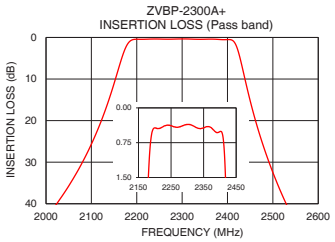
Typical Performance Data at 25°C

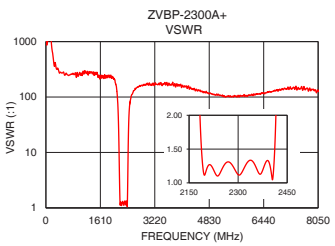
Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
10	86.50	1267.87	2200	7.16
750	95.14	153.79	2210	6.29
1500	78.13	200.40	2220	5.82
2000	43.00	205.06	2230	5.56
2080	29.68	152.29	2240	5.37
2120	20.20	88.14	2250	5.20
2150	10.80	26.04	2260	5.06
2173	3.03	4.41	2270	4.97
2200	0.41	1.08	2280	4.95
2300	0.36	1.16	2290	4.97
2400	0.51	1.25	2300	5.01
2427	3.13	4.19	2310	5.05
2440	8.59	14.64	2320	5.08
2460	17.28	44.88	2330	5.12
2500	30.68	85.27	2340	5.22
2550	43.01	110.53	2350	5.41
3000	98.20	163.61	2360	5.67
5000	110.38	128.71	2370	5.97
7500	101.76	168.79	2380	6.29
8050	100.39	146.28	2400	7.64

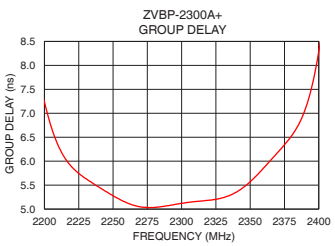
+RoHS Compliant

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









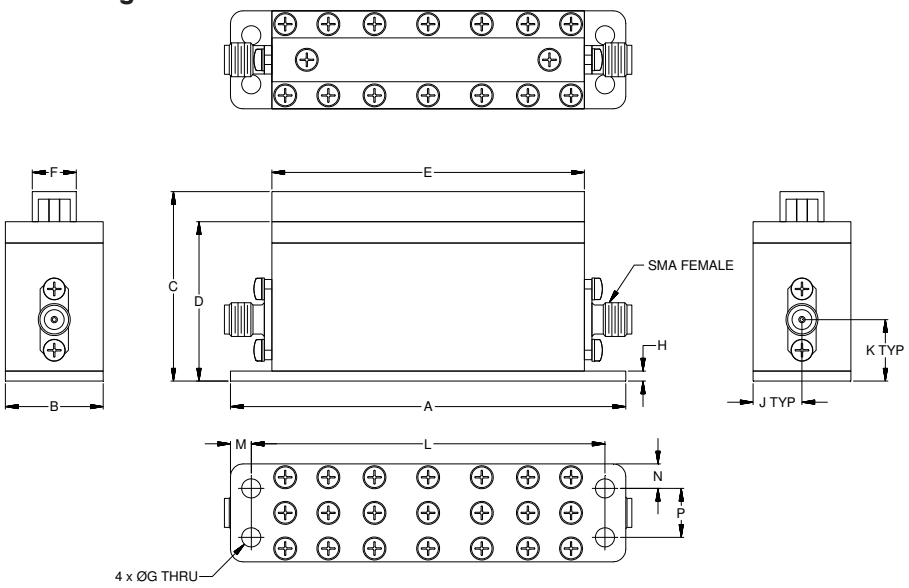
Notes

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
3.10	**.77**	**1.49**	**1.25**	**2.45**	**.34**	**.150**	**.08**
78.81	19.50	37.75	31.75	62.30	8.75	3.81	2.00

J	K	L	M	N	P		Wt.
.38	**.48**	**2.778**	**.16**	**.19**	**.384**		grams
9.75	12.25	70.55	4.13	4.87	9.75		120