Coaxial **Bandpass Filter**

7100 to 7300 MHz 50Ω

The Big Deal

- Low Insertion Loss (2.0 dB typical)
- · Good close-in rejection
- Versatile small size, coaxial, 1.43" length





CASE STYLE: FF704

Product Overview

The VBF-7200+ Band Pass Filter is constructed using internal LTCC Band Pass Filter structure to achieve repeatable performance. Covering 7200 MHz ± 100 MHz, these units offer low insertion loss and good rejection at the band reject edges. Built using Mini-Circuits proven unibody construction which integrates the RF connectors with the case body, the VBF-7200+ takes very little space and meets rugged test lab system environment.

Key Features

Feature	Advantages
Good Rejection close to pass band	Provides good rejection of signals close to the pass band, for improved system performance.
Compact Versatile Case (1.43"x0.41")	Enables use in a variety of applications including space constrained connectorized systems. Connectors: SMA Female (1), SMA Male (1)
Rugged Unibody Construction	Mini-Circuits Unibody construction allows survivability in critical applications including milita- rized or industrial systems.

- 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp



Coaxial **Bandpass Filter**

50Ω 7100 to 7300 MHz

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	2W max. at 25°C
*Passband rating derate linearly to	0.5W at 100°C ambient

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

Outline Drawing

SMA MALE CONN

SMA FEMALE CONN

.312 Across Flats in some models

Outline Dimensions (inch)

Е

.312

7.92

wt

grams

10.0

D

1.43

36.32

E ACROSS FLATS -D±.05

В

.410

10.41

1 В

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Features

- Small size
- Temperature stable
- · Rugged unibody construction

Applications

- Harmonic Rejection
- Transmitters / Receivers



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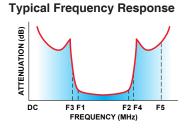
CASE ST	TYI F	FF704

Connectors Model SMA VBF-7200+

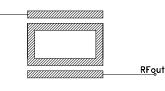
+RoHS Compliant The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications at 25°C

Para	neter	F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Center Frequency	_	—	_	7200	_	MHz
Pass Band	Insertion Loss	F1-F2	7100-7300	_	2.0	3.5	dB
	VSWR	F1-F2	7100-7300	_	2.5		:1
Cton Bond Lower	Insertion Loss	DC-F3	DC-6500	_	15	_	dB
Stop Band, Lower	VSWR	DC-F3	DC-6500	-	30	_	:1
Stop Bond Uppor	Insertion Loss	F4-F5	8400-13800	_	20	_	dB
Stop Band, Upper	VSWR	F4-F5	8400-13800	-	30	_	:1



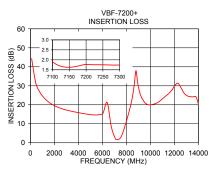
Functional Schematic



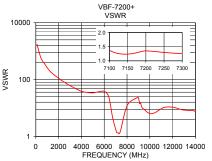
Typical Performance Data at 25°C

RF<u>in</u>

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
(1112)		(.1)
100.00	44.36	1737.18
800.00	26.49	347.44
1500.00	21.53	157.93
2550.00	18.08	78.97
5000.00	14.82	34.07
6050.00	15.61	37.77
6750.00	8.29	4.39
7100.00	1.91	1.37
7300.00	1.74	1.26
8000.00	11.32	11.85
10050.00	20.06	6.30
11050.00	23.36	9.69
12050.00	30.24	10.56
14050.00	19.54	7.17



VBF-7200+ INSERTION LOSS 30 (dB) INSERTION LOSS (0 0 0 0 7000 7500 FREQUENCY (MHz) 6500 8000 8500



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