# Coaxial **Bandpass Filter**

50Ω 11200 to 11400 MHz

# **The Big Deal**

- Low insertion loss, 2dB typical
- Broad Stopband performance upto 20GHz
- Fast roll-off
- Connectorized package
- Small size

# **Product Overview**

ZVBP-11G3+ is a 50 $\Omega$  cavity filter for X band. Frequency band of this filter is used in satellite and radar 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 upto 20GHz
Connectorized package and small size	Connectorized package is easy to interface with other devices and well suited for test setups. Package size is so small



**ZVBP-11G3+** 

CASE STYLE: PU2164

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

## **Mini-Circuits**

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# Coaxial **Bandpass Filter**

#### 50Ω 11200 to 11400 MHz

#### **Features**

- · Low insertion loss, 2 dB typical
- Broad Stopband performance upto 20GHz

**Functional Schematic** 

**Typical Frequency Response** FREQUENCY (MHz) F1 F2

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site

for RoHS Compliance methodologies and qualifications

F3

DC

(qB)

**NSERTION LOSS** 

RF OUT

- · Fast roll-off
- · Connectorized package
- Small size

#### **Applications**

- Satellite
- Radar

**BF IN** 



ZVBP-11G3-S+ SMA-F SMA-F

#### Electrical Specifications at 25°C

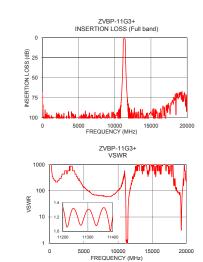
Parameter		F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Center Frequency	-	-	-	11300	-	MHz
Pass Band	Insertion Loss	F1-F2	11200-11400	-	2	3	dB
	VSWR	F1-F2	11200-11400	-	1.4	1.5	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 11030	40	48	-	dB
	VSWR	DC-F3	DC - 11030	-	40	-	:1
Stop Band, Upper	Insertion Loss	F4-F5	11580-20000	40	48	-	dB
	VSWR	F4-F5	11580-20000	-	7	-	:1

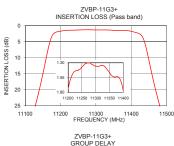
Maximum Ratings				
Operating Temperature	-40°C to 85°C			
Storage Temperature	-55°C to 100°C			
RF Power Input	10 W max.			

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

#### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
10	68.19	1737.18	11200	9.04
500	96.68	289.53	11210	8.42
3000	104.04	868.59	11220	7.72
7050	103.71	66.82	11230	7.14
9500	101.21	75.53	11240	6.74
11030	53.60	289.53	11250	6.46
11115	30.18	75.53	11260	6.26
11140	19.96	31.03	11270	6.12
11175	3.44	1.94	11280	6.01
11180	2.55	1.34	11290	5.94
11200	1.74	1.34	11300	5.90
11300	1.35	1.31	11310	5.89
11400	1.77	1.22	11320	5.91
11420	2.39	1.33	11330	5.95
11430	3.21	1.55	11340	6.03
11470	20.55	18.30	11350	6.16
11495	30.33	28.96	11360	6.34
11580	52.74	56.04	11380	6.92
16000	100.46	1737.18	11390	7.42
20000	72.31	217.15	11400	8.05







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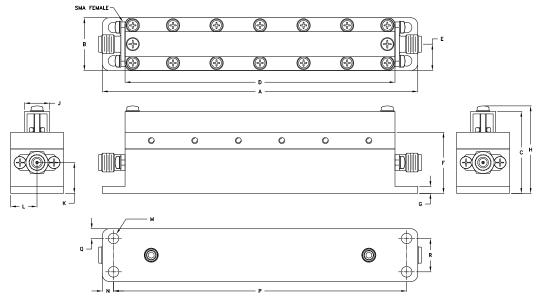
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**ZVBP-11G3+** 

#### **Coaxial Connections**

INPUT	SMA-FEMALE		
OUTPUT	SMA-FEMALE		

### **Outline Drawing**



#### Outline Dimensions ( inch )

А	В	С	D	Е	F	G	н	J
4.47	.75	1.16	3.82	.37	.87	.10	1.24	.36
113.43	19.00	29.50	97.07	9.50	22.00	2.50	31.48	9.02
K	L	М	N	Р	Q	R		Wt.
К .44	L .37	М . <b>150</b>		P 4.15	Q .14	R . <b>47</b>		Wt. grams

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