**Mini-Circuits** 50 $\Omega$  1150 to 1250 MHz SMA Female

**Bandpass Filter** 

**CAVITY COAXIAL** 

#### **KEY FEATURES**

- Low Insertion Loss, 0.6 dB Typ.
- Good Return Loss, 20 dB Typ.
- High Rejection, 100 dB Typ.
- Wide Stopband up to 2800 MHz
- Power Handling 50 Watts

#### **APPLICATIONS**

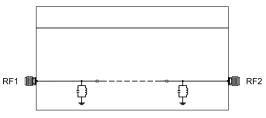
- GPS
- Navigation Systems

#### **PRODUCT OVERVIEW**

Mini-Circuits' ZVBP-1200-S+ is a coaxial cavity filter designed by implementing resonant structures with very high Q and are ideal for narrow-band, high-selectivity applications.Mini-Circuits' coaxial cavity filters feature a special protective assembly to prevent accidental de-tuning that would otherwise require expensive replacement or return to factory for re-tuning. Precise machining allows realization of cavity filters with small form factors for applications where size is critical.

#### **FUNCTIONAL DIAGRAM**

Generic photo used for illustration purposes only



### **ELECTRICAL SPECIFICATIONS<sup>1</sup> AT +25°C**

Parameter		F#	Frequency (MHz)	Min.	Тур.	Max.	Units
Passband	Center Frequency	_	_	_	1200	-	MHz
	Insertion Loss	F1-F2	1150 - 1250	_	0.6	1.1	dB
	Return Loss	F1-F2	1150 - 1250	15	20	_	dB
Stop Band, Lower	Rejection	DC-F3	DC - 900	70	100	_	dB
		F3-F4	900 - 1095	50	58	_	
Stop Band, Upper	Rejection	F5-F6	1305 - 1500	60	68	_	ID
		F6-F7	1500 - 2800	70	100	-	dB

1. This filter is bi-directional RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

#### ABSOLUTE MAXIMUM RATINGS<sup>2,3</sup>

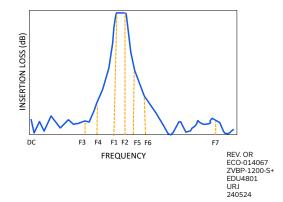
Parameter	Ratings	
Operating Temperature	-40°C to +85°C	
Storage Temperature	-55°C to +100°C	
Input Power <sup>4</sup>	50W at +25°C	

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

3. Input and output ports are DC short to ground.

4. Power rating applies only to signals within the passband.

#### **TYPICAL FREQUENCY RESPONSE AT +25°C**



### Mini-Circuits



# ZVBP-1200-S+



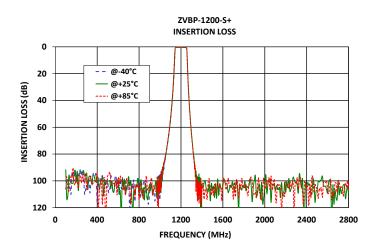
**ZVBP-1200-S+** 

Mini-Circuits

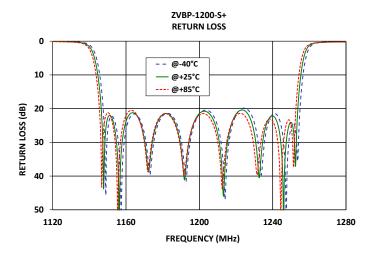
50Ω 1150 to 1250 MHz

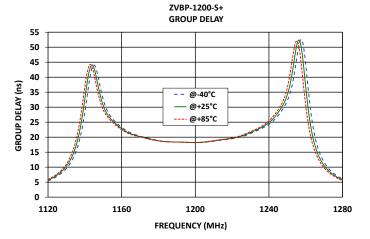
Hz SMA Female

#### **TYPICAL PERFORMANCE GRAPHS**



ZVBP-1200-S+ **INSERTION LOSS (Zoomed)** 0 4 **NSERTION LOSS (dB)** 0.0 8 0.5 12 1.0 1150 1200 1250 -- @-40°C 16 @+25°C @+85°C 20 1120 1160 1200 1240 1280 FREQUENCY (MHz)







# CAVITY COAXIAL

# Bandpass Filter

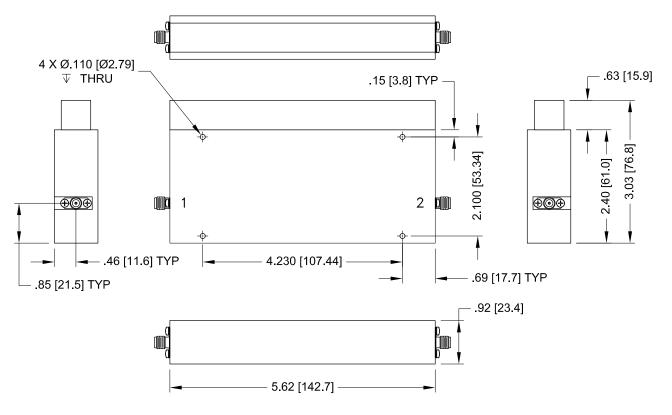
ZVBP-1200-S+

 $\square$  Mini-Circuits 50 $\Omega$  1150 to 1250 MHz SMA Female

## **CONNECTOR DESCRIPTION**

Function	Marking on Unit	Connector
RF1 <sup>1</sup>	1	SMA Female
RF2 <sup>1</sup>	2	SMA Female

# **CASE STYLE DRAWING**



Unit Weight: 330 Grams. Dimensions are in inches [mm]. Tolerances: 2 Pl. ± .100; 3 Pl. ± .015

PRODUCT MARKING\*: ZVBP-1200-S+

\*Marking may contain other features or characters for internal lot control.



CAVITY COAXIAL

# Bandpass Filter



Mini-Circuits

50Ω 1150 to 1250 MHz SMA Female

## ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

	Data
Performance Data & Graphs	Graphs
	S-Parameter (S2P Files) Data Set (.zip file)
Case Style	AAH3615
RoHS Status	Compliant
Environmental Ratings	ENV77T1

**CLICK HERE** 

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-Circuits' 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/terms/viewterm.html



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