CAVITY COAXIAL

Bandpass Filter

ZVBP-323-S+

50Ω 300 to 346 MHz SMA Female

KEY FEATURES

- Low Insertion Loss, 0.2dB Typ.
- Good Return Loss, 22dB Typ.
- Great Rejection, 80dB Typ.
- Wide Stopband up to 1500MHz



Generic photo used for illustration purposes only

APPLICATIONS

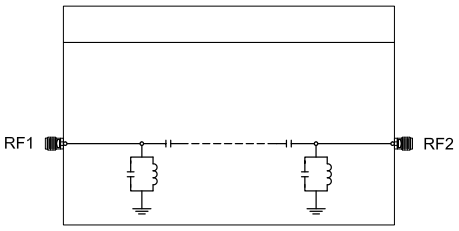
- Test & Measurement
- Lab Use

PRODUCT OVERVIEW

Mini-Circuits' ZVBP-323-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



ELECTRICAL SPECIFICATIONS[1] AT +25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Center Frequency	—	—	—	323	—	MHz
	Insertion Loss	F1-F2	300 - 346	—	0.2	0.6	dB
	Return Loss	F1-F2	300 - 346	16	22	—	dB
Stop Band, Lower	Rejection	DC-F3	DC - 253	45	52	—	dB
Stop Band, Upper	Rejection	F4-F5	393 - 500	58	64	—	dB
		F5-F6	500 - 1500	80	90	—	

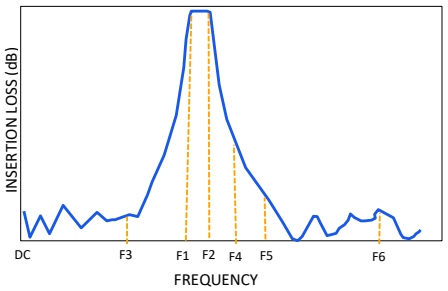
1. This filter is bi-directional RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

ABSOLUTE MAXIMUM RATINGS[2,3]

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
Input Power[4]	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



REV. OR
ECO-019871
ZVBP-323-S+
EDU4635
URJ
231219

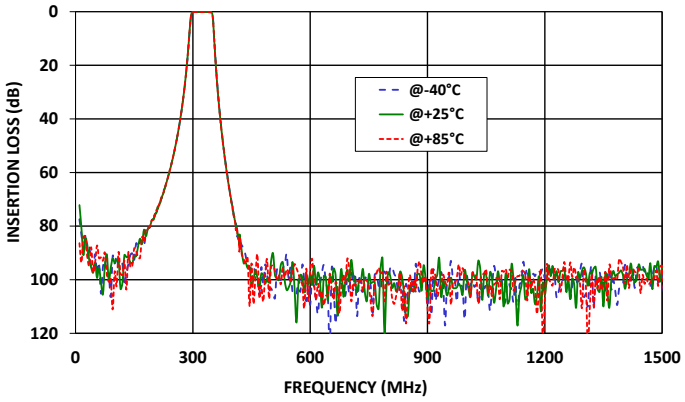
Bandpass Filter

ZVBP-323-S+

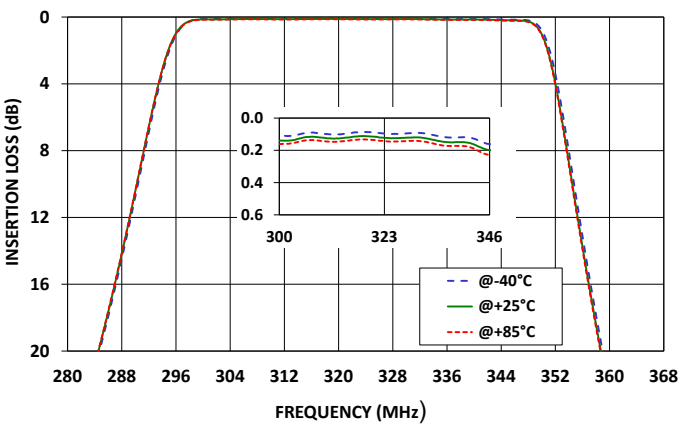
50Ω 300 to 346 MHz SMA Female

TYPICAL PERFORMANCE GRAPHS

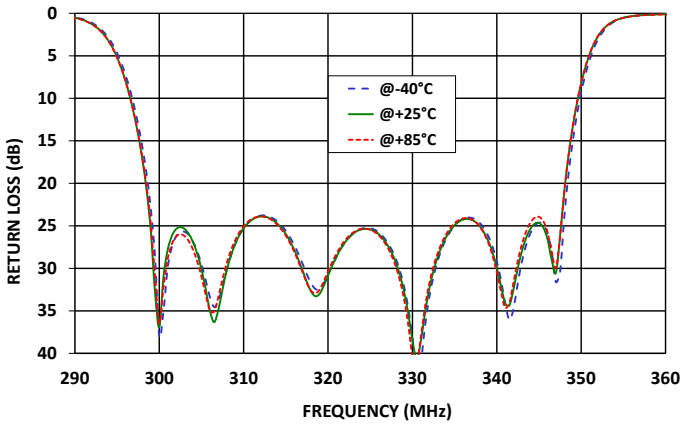
ZVBP-323-S+
INSERTION LOSS



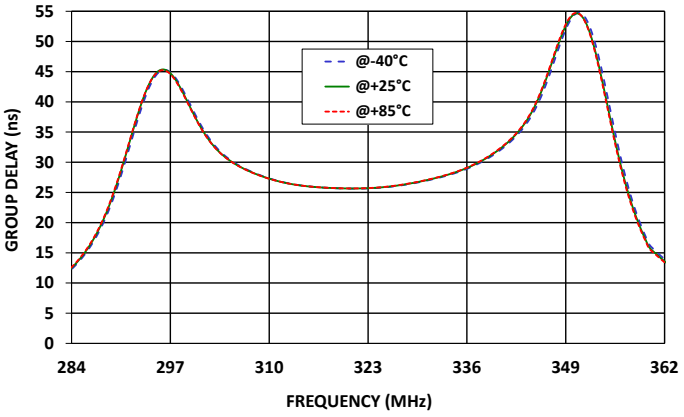
ZVBP-323-S+
INSERTION LOSS (Zoomed)



ZVBP-323-S+
RETURN LOSS



ZVBP-323-S+
GROUP DELAY



Bandpass Filter

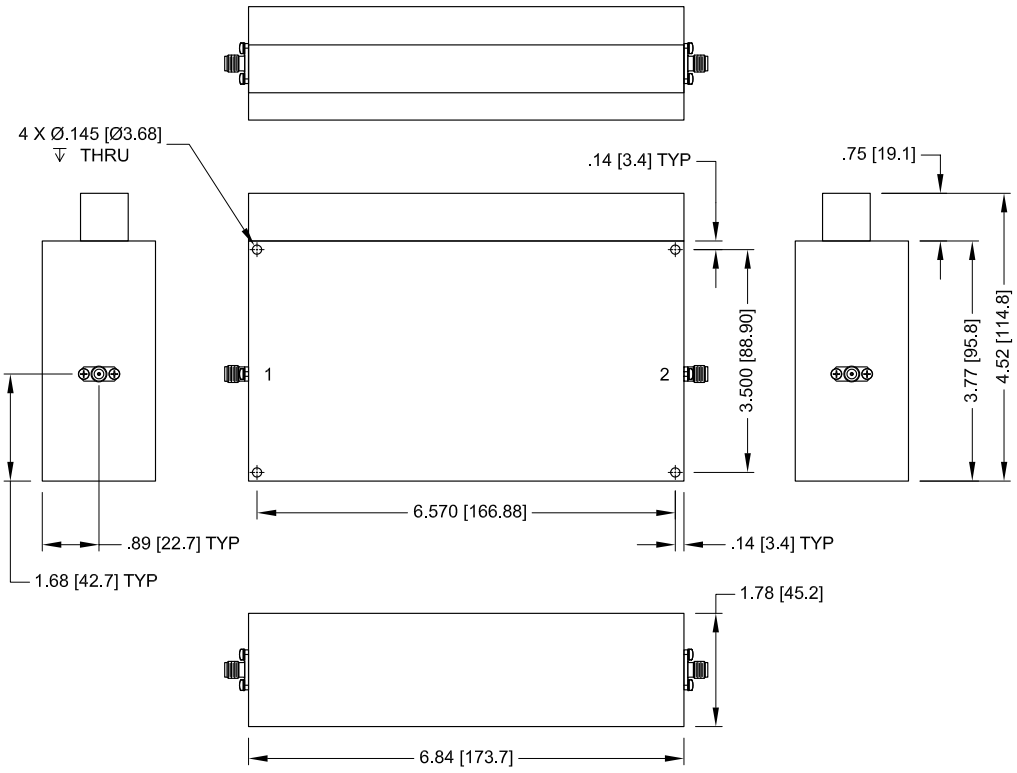
ZVBP-323-S+

50Ω 300 to 346 MHz SMA Female

CONNECTOR DESCRIPTION

Function	Marking on Unit	Connector
RF1[1]	1	SMA Female
RF2[1]	2	SMA Female

CASE STYLE DRAWING



Unit Weight: 725 Grams.
Dimensions are in inches (mm). Tolerances: 2 Pl. ± .100; 3 Pl. ± .015

PRODUCT MARKING*: ZVBP-323-S+

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

Bandpass Filter

ZVBP-323-S+

50Ω 300 to 346 MHz SMA Female

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD **CLICK HERE**

Performance Data & Graphs	Data Graphs S-Parameter (S2P Files) Data Set (.zip file)
Case Style	ZQ3557
RoHS Status	Compliant
Environmental Ratings	ENV77T1

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