CAVITY COAXIAL

Bandpass Filter

ZVBP500W-1R3G+

50Ω 1200 to 1400 MHz N-Male/ Female

KEY FEATURES

- Low Insertion Loss, 0.13 dB Typ.
- Good Return Loss, 20 dB Typ.
- High Rejection, 58 dB Typ.
- Power Handling 200 Watts

Generic photo used for illustration purposes only

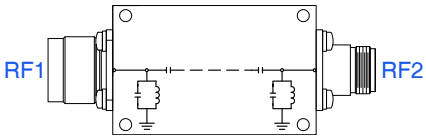
APPLICATIONS

- Radio Location
- Mobile

PRODUCT OVERVIEW

Mini-Circuits' ZVBP500W-1R3G+ 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	Fc	—	—	1300	—	MHz
	Insertion Loss	F1-F2	1200 - 1400	—	0.13	0.40	dB
	Return Loss	F1-F2	1200 - 1400	14	20	—	dB
Stop Band, Lower	Rejection	DC-F3	DC - 550	20	26	—	dB
Stop Band, Upper	Rejection	F4-F5	2000 - 3000	50	58	—	dB
		F5-F6	3000 - 4000	45	53	—	

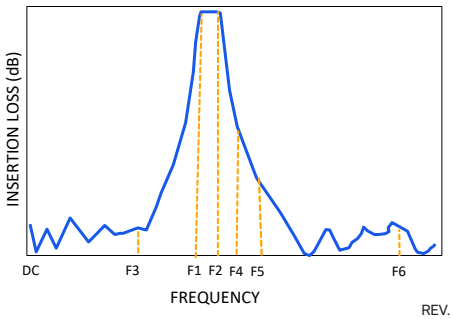
1. This filter is bi-directional RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

ABSOLUTE MAXIMUM RATINGS[2,3]

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
Input Power[4]	200 W 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, Esimated theoretical power handling 500 W Typ.

TYPICAL FREQUENCY RESPONSE AT +25°C



REV. OR
ECO-027015
ZVBP500W-1R3G+
EDU4717
URJ
250918

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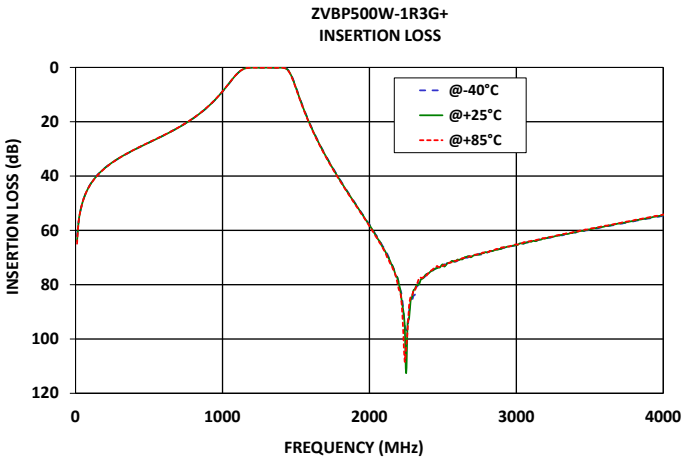
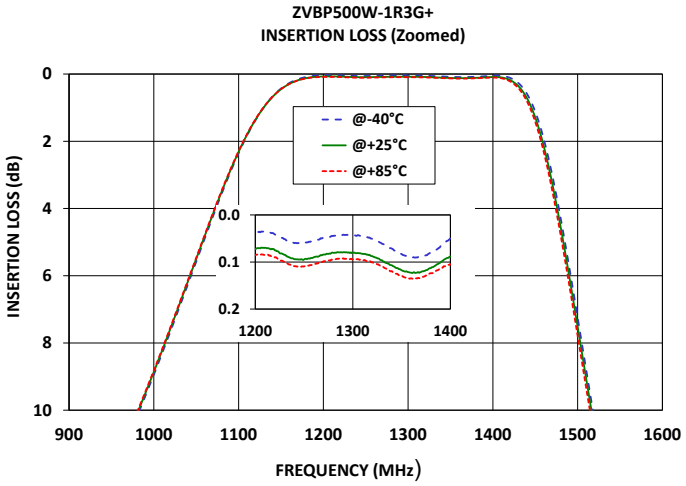
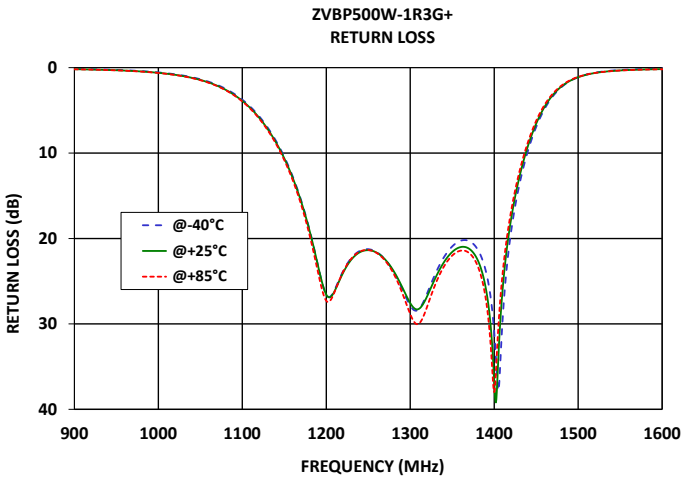
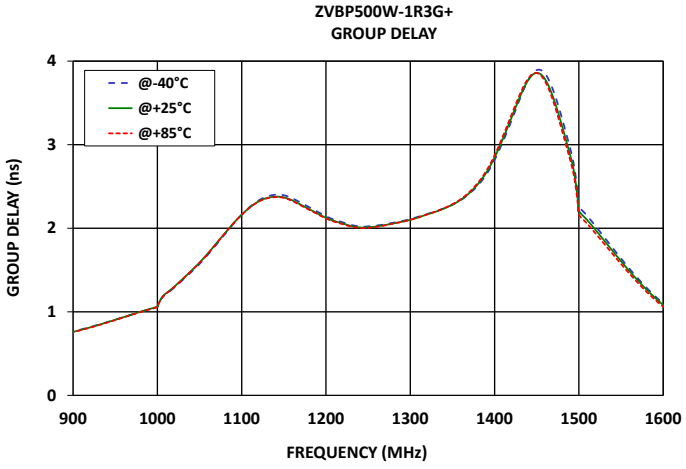
TYPICAL PERFORMANCE GRAPHS









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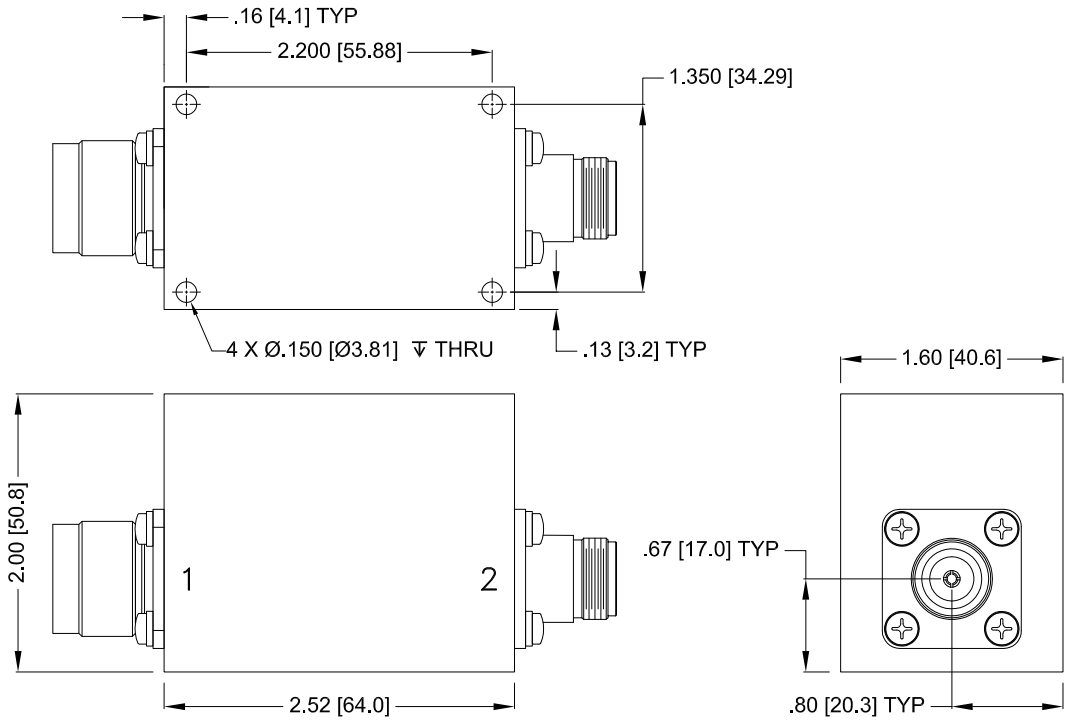
CONNECTOR DESCRIPTION

Function	Marking on Unit	Connector
RF1[1]	1	N- Male
RF2[1]	2	N- Female

CASE STYLE DRAWING



Unit Weight: 270 Grams.

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

PRODUCT MARKING*: ZVBP500W-1R3G+

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

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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD CLICK HERE

Performance Data & Graphs	Data Graphs S-Parameter (S2P Files) Data Set (.zip file)
Case Style	AAC3604
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