CAVITY COAXIAL

Bandpass Filter

ZVBP-3500-S+

50Ω 3400 to 3600 MHz SMA Female

KEY FEATURES

- Low Insertion Loss, 0.6 dB Typ.
- Good Return Loss, 22 dB Typ.
- Great Rejection, 85 dB Typ.
- Wide Stopband up to 11000 MHz
- Power Handling : 20 Watts



Generic photo used for illustration purposes only

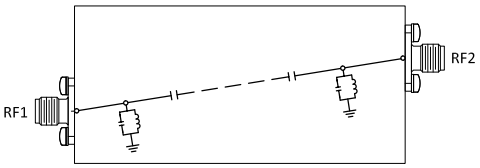
APPLICATIONS

- 5G-N78 Band

PRODUCT OVERVIEW

Mini-Circuits' ZVBP-3500-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 AT +25°C

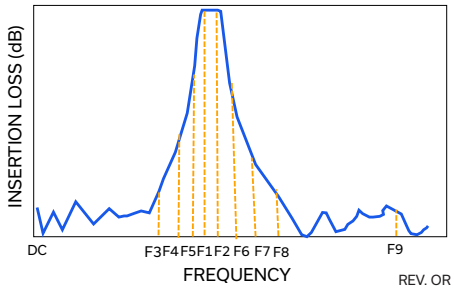
Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Center Frequency	—	—	—	3500	—	MHz
	Insertion Loss	F1-F2	3400 - 3600	—	0.6	1.0	dB
	Return Loss	F1-F2	3400 - 3600	14	22	—	dB
Stopband, Lower	Rejection	DC-F3	DC - 2690	70	85	—	dB
		F3-F4	2690 - 3200	40	45	—	
		F4-F5	3200 - 3300	20	25	—	
Stopband, Upper	Rejection	F6-F7	3640 - 3700	20	25	—	dB
		F7-F8	3700 - 4000	40	45	—	
		F8-F9	4000 - 11000	70	85	—	

ABSOLUTE MAXIMUM RATINGS[1,2]

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
Input Power[3]	20W at +25°C

1. Permanent damage may occur if any of these limits are exceeded.
2. Input and output ports are DC short to ground.
3. Power rating applies only to signals within the passband.

TYPICAL FREQUENCY RESPONSE AT +25°C



REV. OR
ECO-023797
ZVBP-3500-S+
EDU4709
URJ
241203

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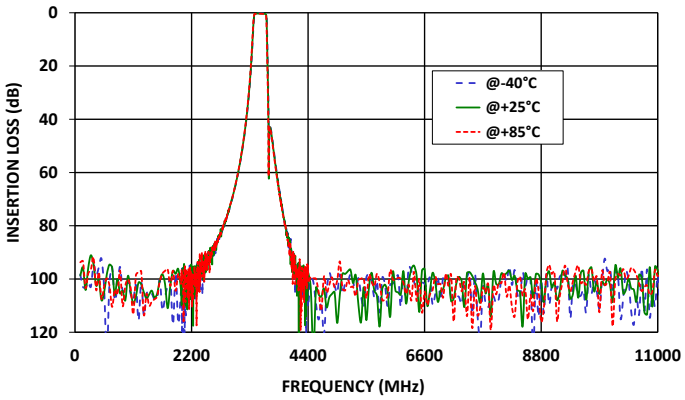
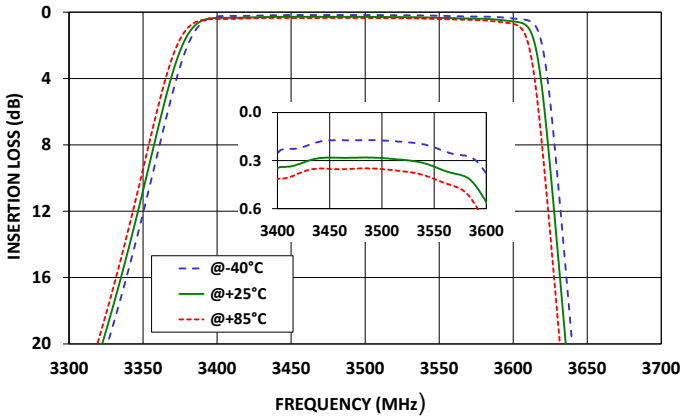
TYPICAL PERFORMANCE GRAPHS

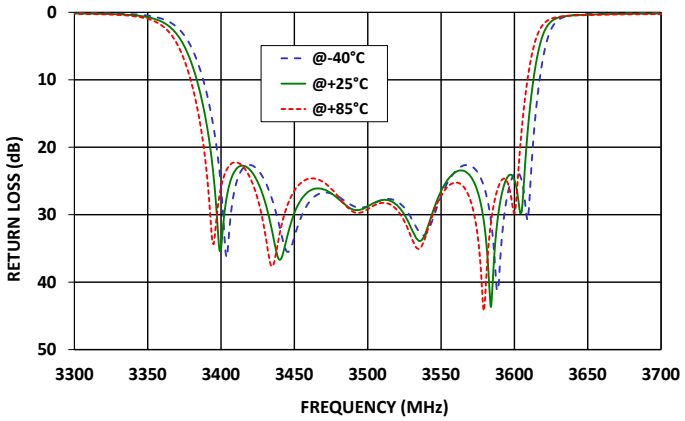
ZVBP-3500-S+
INSERTION LOSS



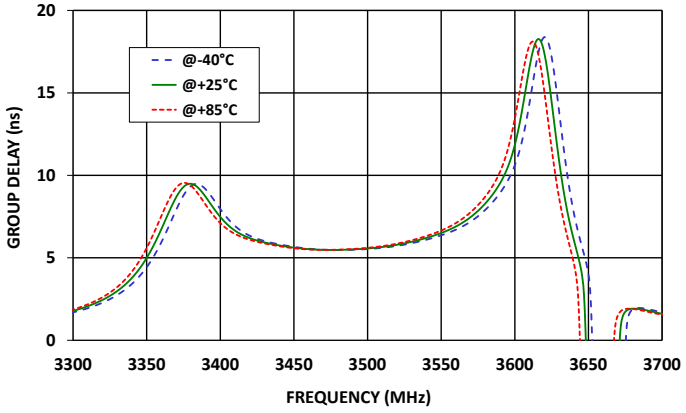
ZVBP-3500-S+
INSERTION LOSS (Zoomed)



ZVBP-3500-S+
RETURN LOSS



ZVBP-3500-S+
GROUP DELAY



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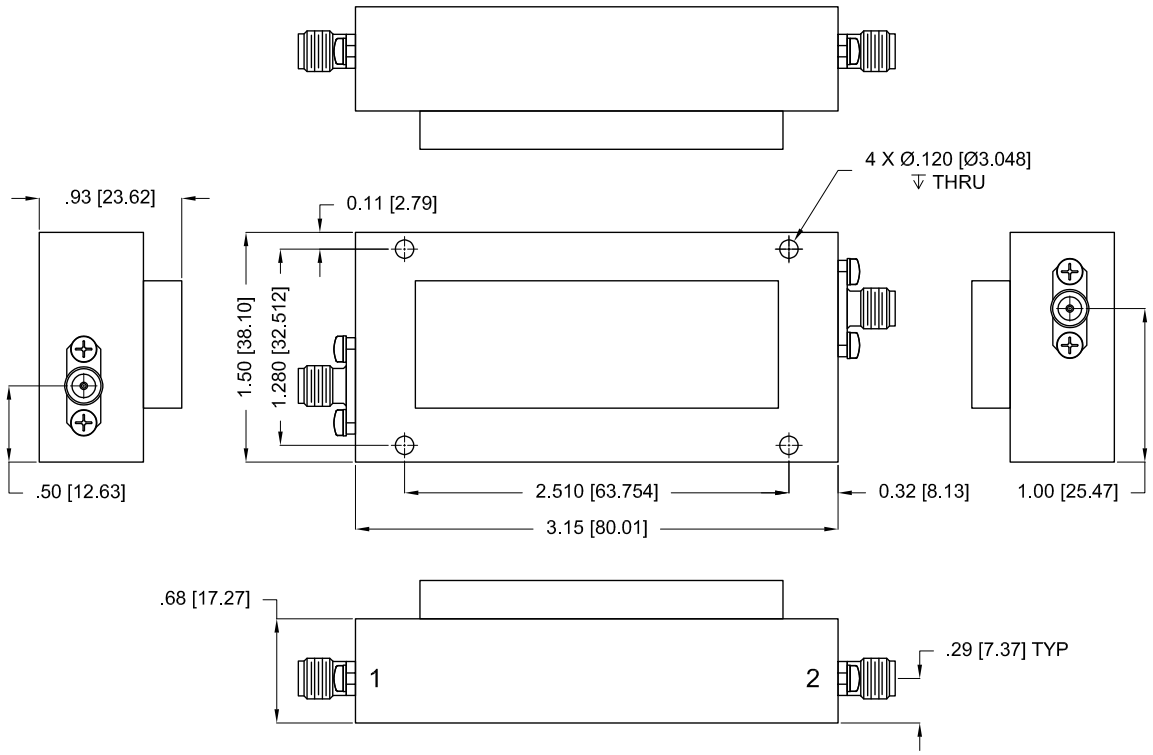
CONNECTOR DESCRIPTION

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

CASE STYLE DRAWING



Unit weight: 115 grams

Dimensions are in inches (mm). Tolerances: 2 Pl. ± .100(2.540); 3 Pl. ± .015(0.381)

PRODUCT MARKING*: ZVBP-3500-S+

*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	AAW3655
RoHS Status	Compliant
Environmental Ratings	ENV46

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