CAVITY COAXIAL

Bandpass Filter

ZVBP-3R25G-S+

50Ω 3000 to 3500 MHz SMA-Female

KEY FEATURES

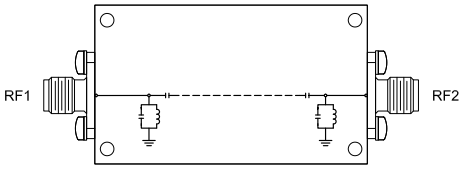
- Low Insertion Loss of 0.3 dB Typ.
- Good Return Loss of 19 dB Typ.
- Good Rejection, 61 dB Typ.
- Stopband up to 7800 MHz

Generic photo used for illustration purposes only

APPLICATIONS

- Test & Measurement Equipment
- R&D Lab, Production, and OTA Test Systems

FUNCTIONAL DIAGRAM



PRODUCT OVERVIEW

Mini-Circuits' ZVBP-3R25G-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.

ELECTRICAL SPECIFICATIONS[1] AT +25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Center Frequency	Fc	—	—	3250	—	MHz
	Insertion Loss	F1-F2	3000 - 3500	—	0.3	0.7	dB
	Return Loss	F1-F2	3000 - 3500	14	19	—	dB
Stop Band, Lower	Rejection	DC-F3	DC - 2200	55	61	—	dB
		F3-F4	2200 - 2600	35	40	—	
		F4-F5	2600 - 2850	10	16	—	
Stop Band, Upper	Rejection	F6-F7	3650 - 3800	10	16	—	dB
		F7-F8	3800 - 4100	25	32	—	
		F8-F9	4100 - 7800	45	51	—	

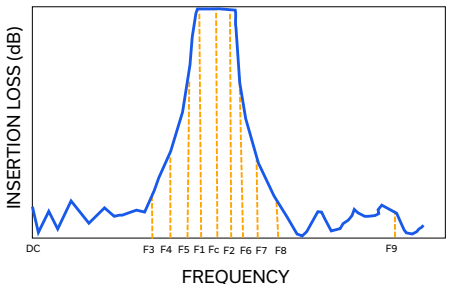
1. This filter is bi-directional RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

ABSOLUTE MAXIMUM RATINGS[2,3]

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
Input Power[4]	25 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.

TYPICAL FREQUENCY RESPONSE AT +25°C



REV. A
ECO-024499
ZVBP-3R25G-S+
EDU4368
URJ
250212

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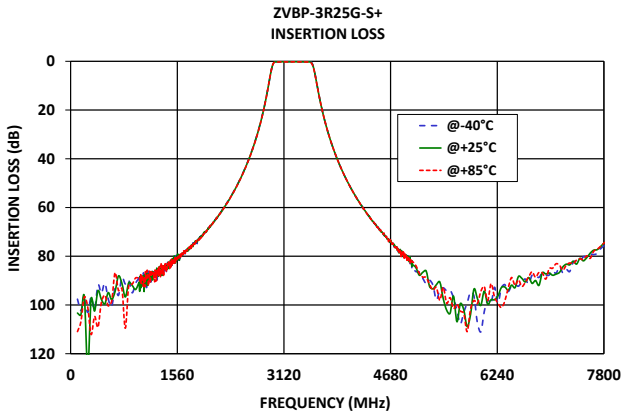
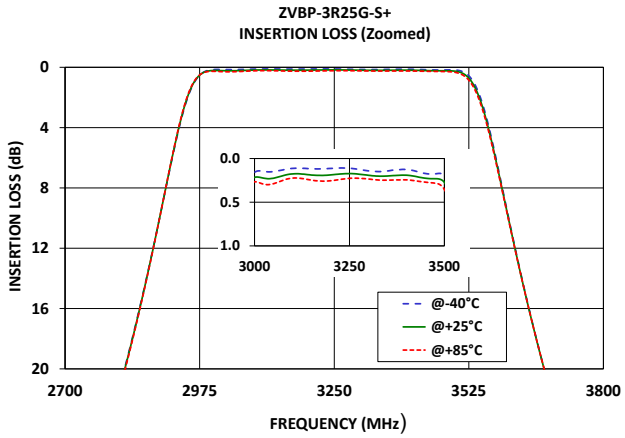
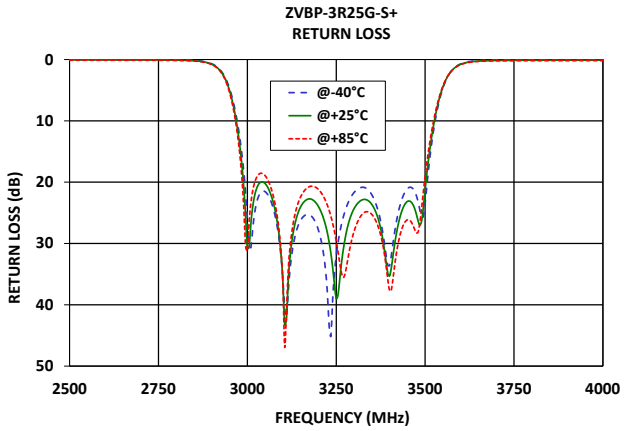
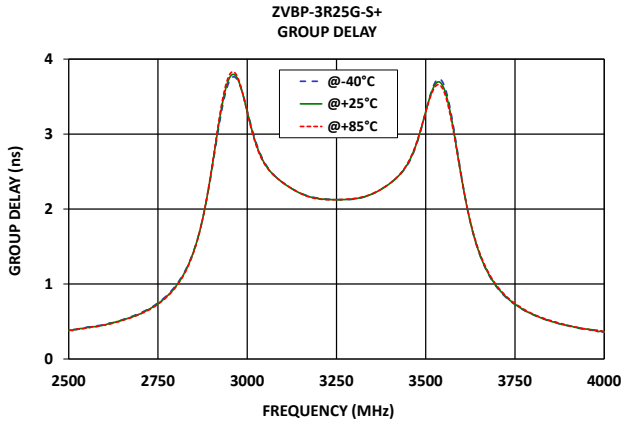
TYPICAL PERFORMANCE GRAPHS









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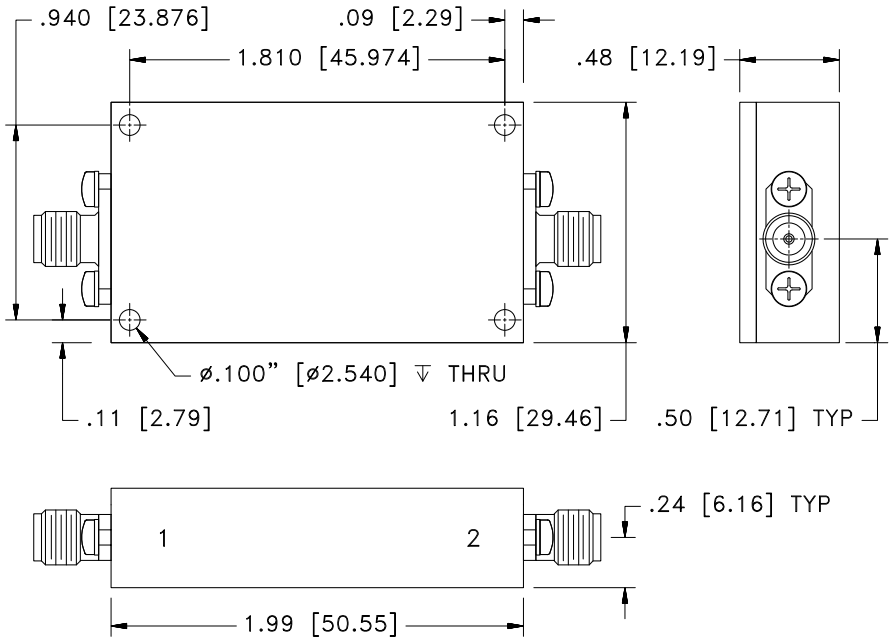
CONNECTOR DESCRIPTION

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

CASE STYLE DRAWING



Dimensions are in inches [mm]
Tolerances: 2Pl.±.10 [2.54]; 3 PL.±.015 [.381]
Unit weight: 87 Grams

PRODUCT MARKING*: ZVBP-3R25G-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	YM3241
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