



CAVITY COAXIAL

Bandpass Filter

ZVBP-2250-S+

50Ω

2200 to 2300 MHz SMA Female

KEY FEATURES

- Low Insertion Loss, 0.7 dB Typ.
- Good Return Loss, 21 dB Typ.
- High Rejection, 89 dB Typ.
- Stopband up to 10.5 GHz
- Power Handling 25 Watts

APPLICATIONS

- Aerospace
- Defense

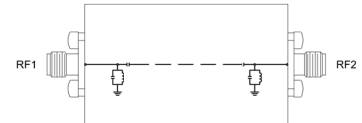
PRODUCT OVERVIEW

Mini-Circuits' ZVBP-2250-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.



Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM



ELECTRICAL SPECIFICATIONS¹ AT +25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Center Frequency	—	—	—	2250	—	MHz
	Insertion Loss	F1-F2	2200 - 2300	—	0.7	1.1	dB
	Return Loss	F1-F2	2200 - 2300	14	21	—	dB
Stop Band, Lower	Rejection	DC-F3	DC - 1800	75	84	—	dB
		F3-F4	1800 - 2115	30	36	—	
Stop Band, Upper	Rejection	F5-F6	2380 - 2650	30	36	—	dB
		F6-F7	2650 - 10500	75	89	—	

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

ABSOLUTE MAXIMUM RATINGS^{2,3}

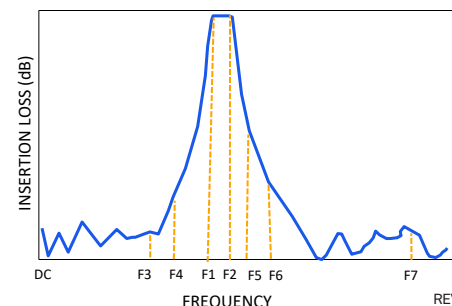
Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
Input Power ⁴	25 W max. at +25°C

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-026012
ZVBP-2250-S+
EDU4966
URJ
250626





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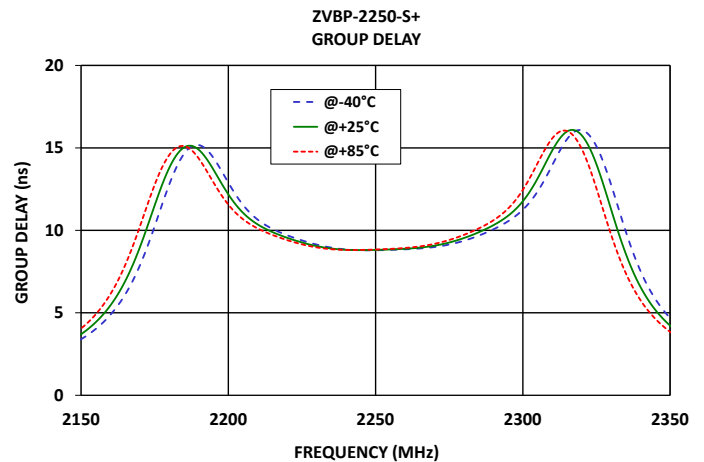
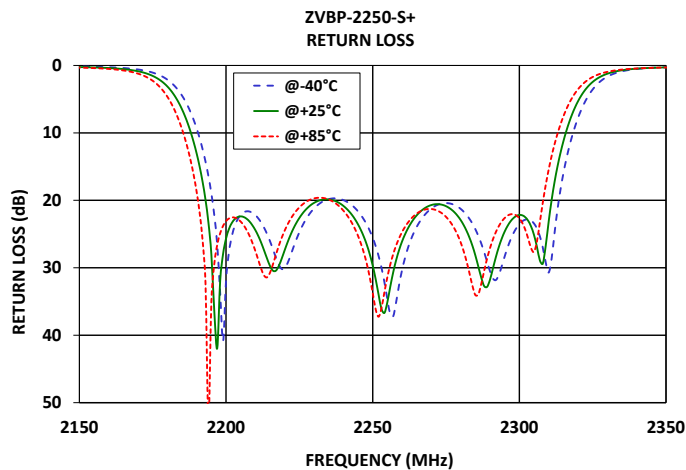
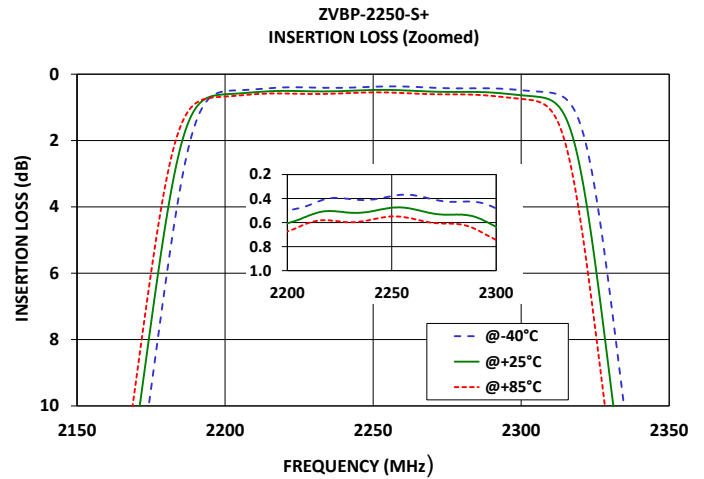
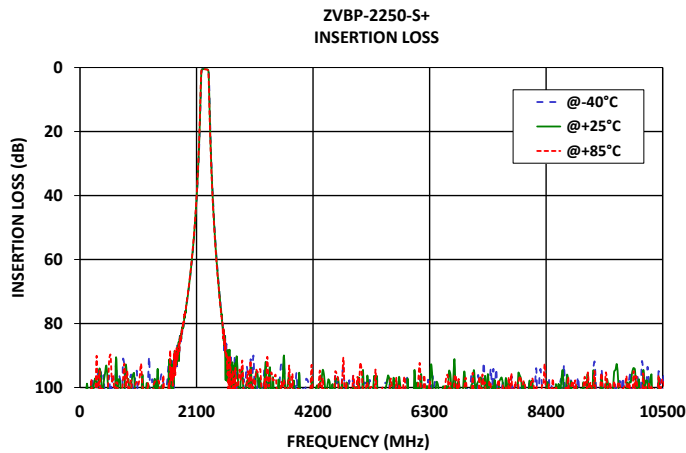
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TYPICAL PERFORMANCE GRAPHS





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Mini-Circuits

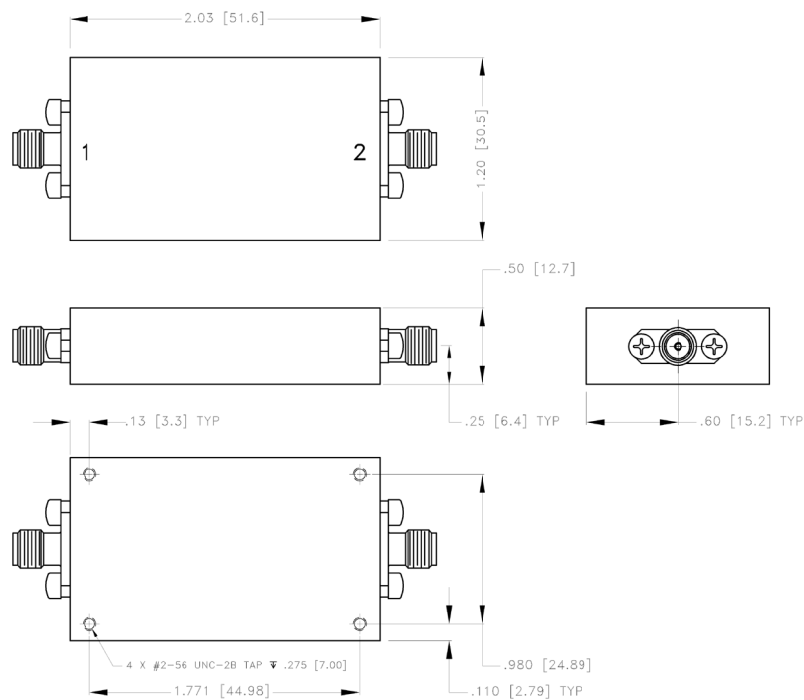
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CONNECTOR DESCRIPTION

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

CASE STYLE DRAWING



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

Unit weight: 114 Grams

PRODUCT MARKING*: ZVBP-2250-S+

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





Mini-Circuits

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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	BAQ3693
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

