



LUMPED LC COAXIAL

High Pass Filter

ZHPB-1000-S+

50Ω 1 to 16 GHz SMA Female

KEY FEATURES

- Low Insertion Loss, 0.9 dB Typ.
- Good Return Loss, 15 dB Typ.
- Good Rejection, 45 dB Typ.

APPLICATIONS

- Test and Measurement

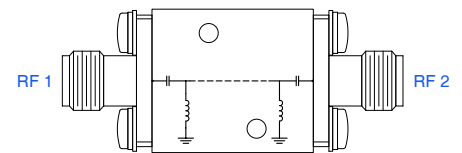
PRODUCT OVERVIEW

Mini-Circuits' ZHPB-1000-S+ is a high pass filter built in broadband connectorized package. Covering 1-16 GHz bandwidth, these units offer good matching within the passband and good rejection in stopband. ZHPB-1000-S+ offer good return loss up to 16 GHz and excellent insertion loss of 0.9 dB Typ.



Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM



ELECTRICAL SPECIFICATIONS AT +25°C

Parameter		F#	Frequency (GHz)	Min.	Typ.	Max.	Units
Passband	Insertion Loss	F3-F4	1 - 6	—	0.9	2.0	dB
		F4-F5	6 - 16	—	2.0	—	
	Return Loss	F3-F4	1 - 6	12	15	—	dB
		F4-F5	6 - 16	—	10	—	
Stopband	Rejection	DC-F1	DC - 0.3	35	45	—	dB
		F1-F2	0.3 - 0.45	20	30	—	
	Freq. Cut-Off ¹	Fc	0.73	—	3	—	dB

1. Typical variation $\pm 5\%$.

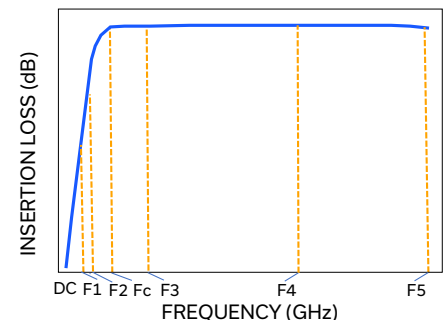
ABSOLUTE MAXIMUM RATINGS²

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
Input Power ³	1 W at 25°C

2. Permanent damage may occur if any of these limits are exceeded.

3. Power rating applies only to signals within the passband.

TYPICAL FREQUENCY RESPONSE





LUMPED LC COAXIAL

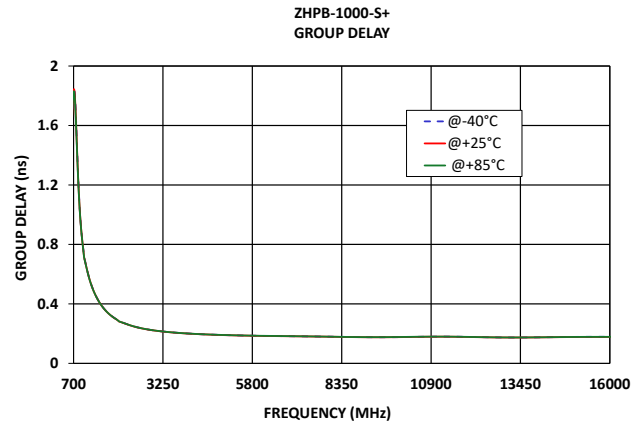
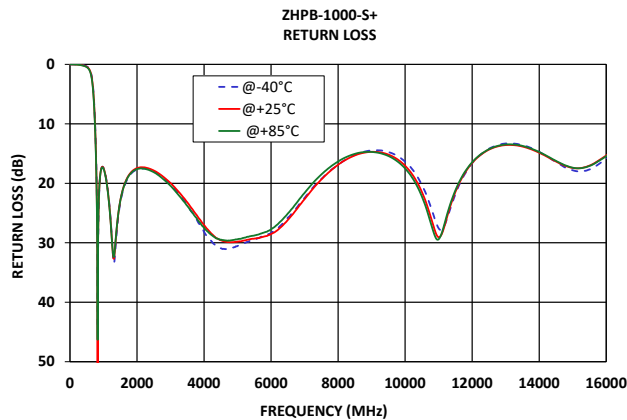
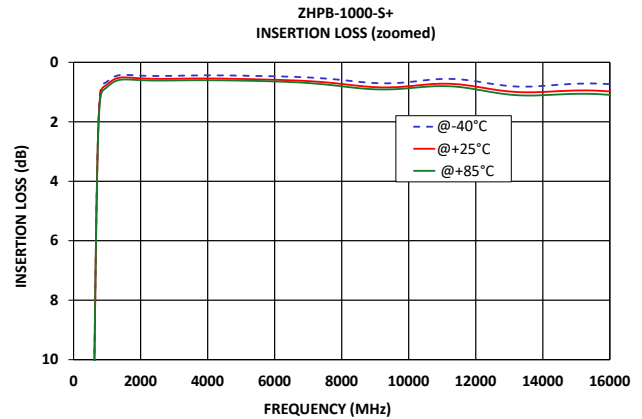
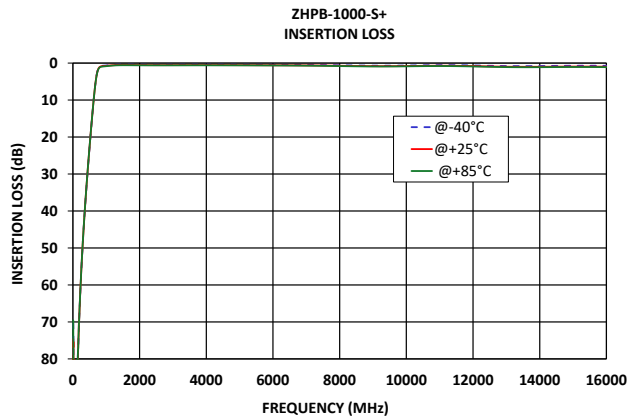
High Pass Filter

ZHPB-1000-S+

Mini-Circuits

50Ω 1 to 16 GHz SMA Female

TYPICAL PERFORMANCE GRAPHS





High Pass Filter

ZHPB-1000-S+

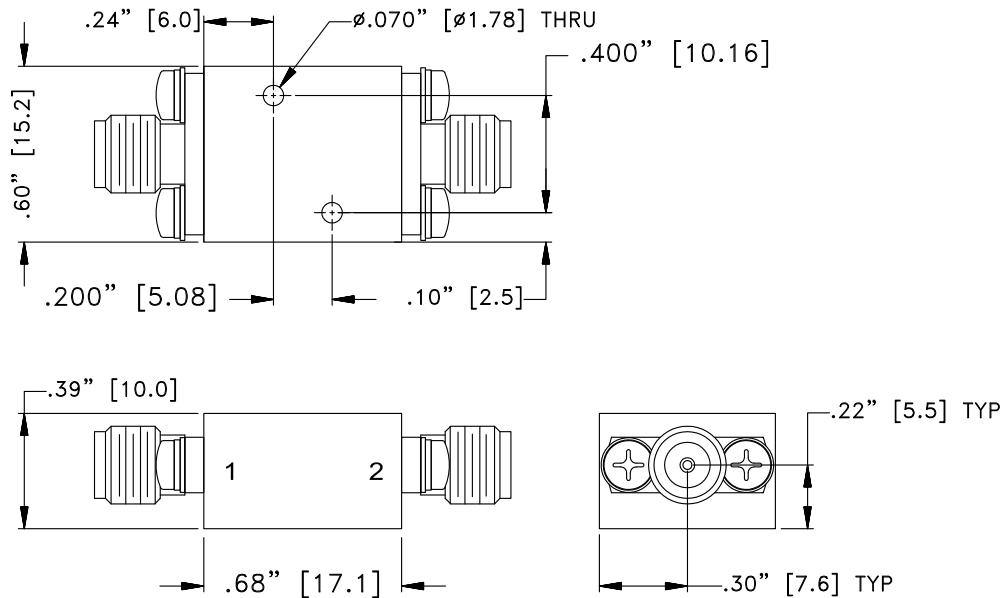
50 Ω 1 to 16 GHz SMA Female

CONNECTOR DESCRIPTION

Function	Connector
RF1 ⁴	SMA Female
RF2 ⁴	SMA Female

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

CASE STYLE DRAWING



Unit weight: 24grams

Dimensions are in inches (mm). Tolerances: 2 Pl.±.050"; 3 Pl.±.015"

PRODUCT MARKING*: ZHPB-1000-S+

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



Mini-Circuits

LUMPED LC COAXIAL

High Pass Filter

ZHPB-1000-S+

50Ω 1 to 16 GHz 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	UK3042
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

