



(LTCC) COAXIAL

High Pass Filter

ZHFW-K9000+

50 Ω

10 to 19.5 GHz 2.92mm Female

KEY FEATURES

- Low Insertion Loss, 1.7 dB Typ.
- Return Loss, 11 dB Typ.
- Stopband Rejection, 42 dB Typ.
- Broadband Connectorized Package.
- Power Handling: 2.5 Watts

APPLICATIONS

- X Band Satellite
- Cellular Backhaul
- X Band Radar
- Test and Measurement

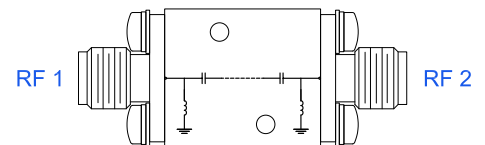
PRODUCT OVERVIEW

ZHFW-K9000+ is a 50 Ω high pass filter built in broad band connectorized package. Covering 10-19.5 GHz bandwidth, these units offer good matching within the passband and good rejection in stopband. ZHFW-K9000+ offer low insertion loss, and excellent power handling capability. It handles up to 2.5 W RF input power and provides a wide operating temperature range from -55°C to 125°C.



Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM

ELECTRICAL SPECIFICATIONS^{1,2} AT +25°C

Parameter		F#	Frequency (GHz)	Min.	Typ.	Max.	Units
Passband	Insertion Loss	F3-F4	10 - 11.5	—	2.4	—	dB
		F4-F5	11.5 - 17	—	1.7	2.3	
		F5-F6	17 - 19.5	—	1.7	—	
	Return Loss	F3-F4	10 - 11.5	—	12	—	dB
		F4-F5	11.5 - 17	—	13	—	
		F5-F6	17 - 19.5	—	11	—	
Stopband	Rejection	DC-F1	DC - 6	32	42	—	dB
		F1-F2	6 - 7.2	23	37	—	
	Freq. Cut-Off ³	Fc	9.1	—	3	—	dB

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

2. This component should not be used as a DC-block. In applications where DC voltage and/or current is present at either the input or output ports, external DC blocking capacitors are required.

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

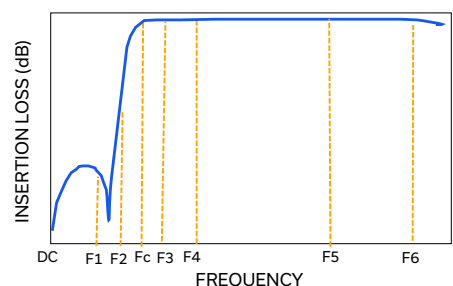
ABSOLUTE MAXIMUM RATINGS⁴

Parameter	Ratings
Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +125°C
Input Power ⁵	2.5 W @ +25°C

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

5. Power rating applies only to signals within the passband. Power rating above +25°C operating temperature decreases linearly to 0.6 W at +125°C.

TYPICAL FREQUENCY RESPONSE





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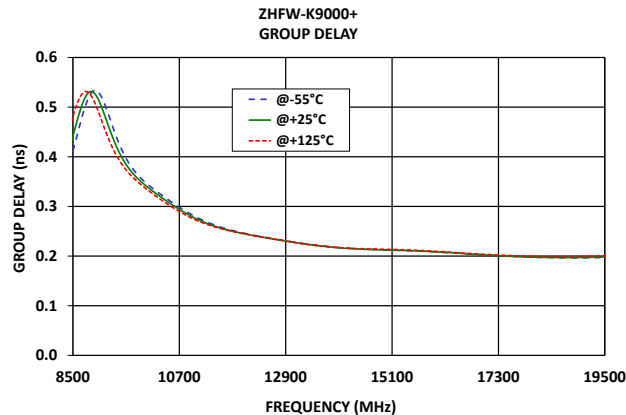
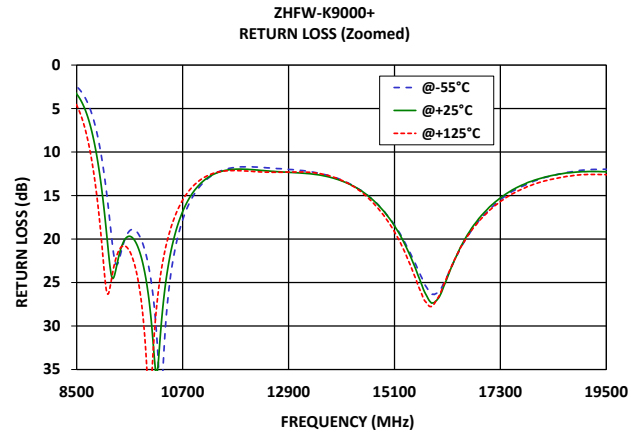
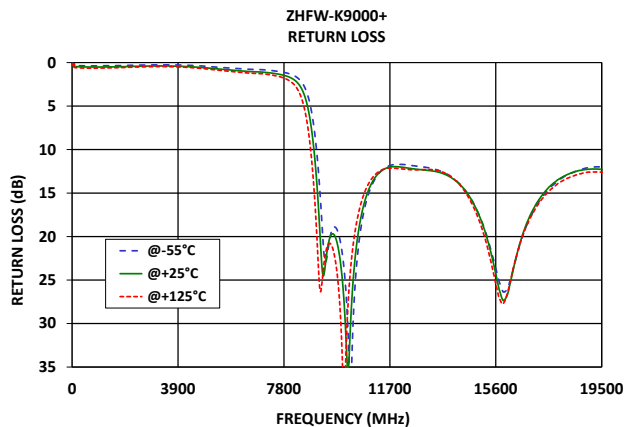
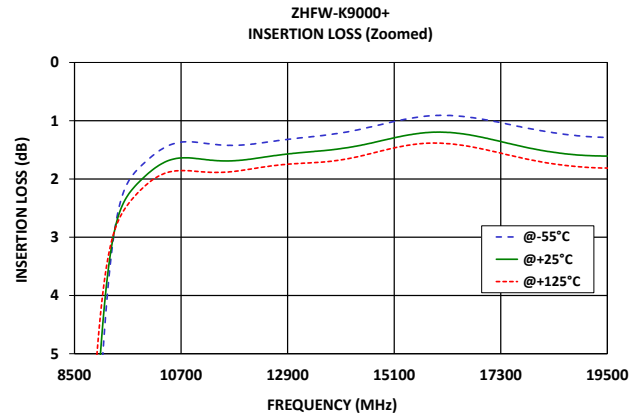
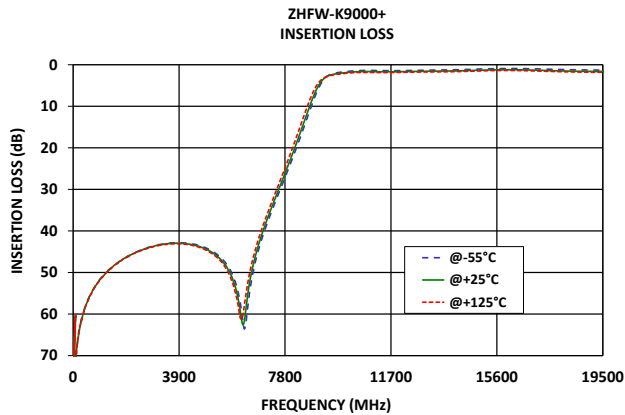
ZHFW-K9000+

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50 Ω

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TYPICAL PERFORMANCE GRAPHS





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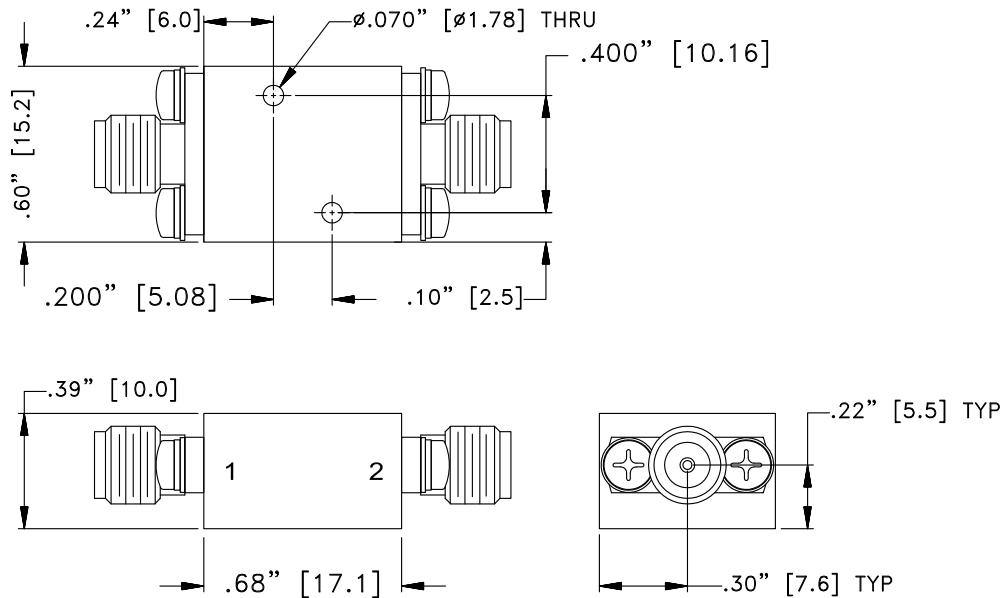
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CONNECTOR DESCRIPTION

Function	Marking on Unit	Connector
RF1 ¹	1	2.92mm Female
RF2 ¹	2	2.92mm Female

CASE STYLE DRAWING



Unit weight: 24grams

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

PRODUCT MARKING*: ZHFW-K9000+

*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	UK3042
RoHS Status	Compliant
Environmental Ratings	ENV124

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.
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