

# Coaxial High Pass Filter

## ZHFW-K7500+

50Ω 8200 to 21000 MHz



Generic photo used for illustration purposes only  
CASE STYLE: UK3042

### The Big Deal

- Good power handling, 2.5W
- Temperature stable
- Broadband connectorized package
- Good rejection, 49 dB typical

### Product Overview

ZHFW-K7500+ is a 50Ω high pass filter built in broadband connectorized package. Covering 8200-21000 MHz bandwidth, these units offer good matching within the passband and good rejection in stopband. ZHFW-K7500+ offer low insertion loss, and excellent power handling capability. It handles up to 2.5W RF input power and provides a wide operating temperature range from -55°C to 125°C.

### Key Features

Feature	Advantages
Low passband insertion loss	Suitable for high performance application.
2.5W Power handling	Supports a range of system power requirements.
Connectorized package	The connectorized package is easy to interface with other devices and well suited for test setups.

#### 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-Circuit's 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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



# High Pass Filter

## ZHFW-K7500+

50Ω 8200 to 21000 MHz



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Connectors Model  
2.92mm-F ZHFW-K7500+

**+RoHS Compliant**

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

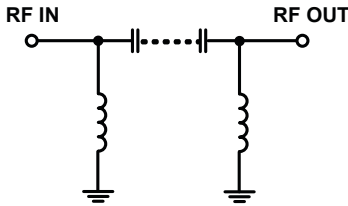
### Features

- Very good rejection, 49dB typ.
- Temperature stable

### Applications

- Test and measurements
- Military applications
- Telecommunications and broadband wireless systems

### Functional Schematic



### Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Stop Band	Rejection Loss	DC-F1	DC - 4000	42	49	-	dB
		F1-F2	4000 - 6000	25	34	-	dB
	Freq. Cut-Off	F3*	7600	-	3.0	-	dB
Pass Band	Insertion Loss	F4-F5	8200 - 9500	-	2.2	-	dB
		F5-F6	9500 - 15000	-	1.6	2.4	dB
		F6-F7	15000 - 21000	-	2.4	-	dB
	Return Loss	F4-F7	8200 - 21000	-	10	-	dB

In Applications where DC voltage is present at either input or output ports, DC blocks are required.  
\* Typically, a ±5% frequency deviation from the stated value may occur on a unit-to-unit basis.

### Maximum Ratings

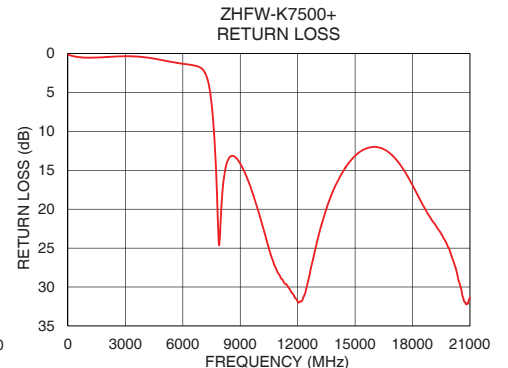
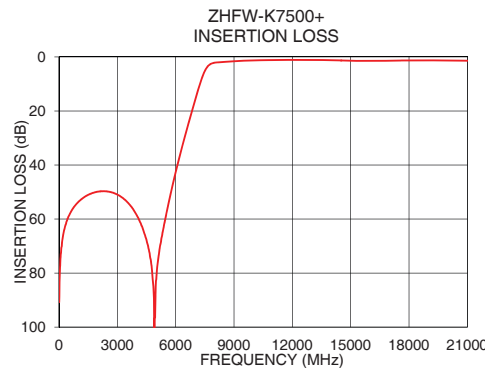
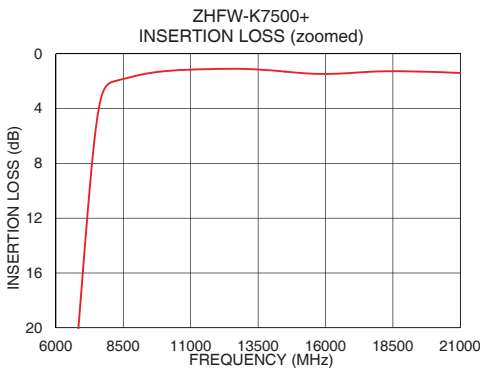
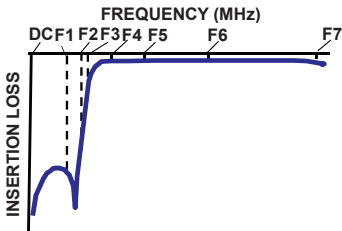
Operating Temperature	-55°C to 125°C
Storage Temperature	-55°C to 125°C
RF Power Input*	2.5W max. @25°C

\*Passband rating, derate linearly to 0.7 at 125°C ambient  
Permanent damage may occur if any of these limits are exceeded.

### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)
10	90.76	0.10
500	58.93	0.42
1000	53.62	0.51
2000	49.88	0.43
3000	50.95	0.33
4000	58.60	0.46
5000	82.38	0.87
6000	42.63	1.30
6440	30.33	1.45
6820	20.47	1.67
7240	10.17	2.91
7600	3.91	9.07
8200	1.99	15.11
9000	1.60	14.13
9500	1.40	16.88
12000	1.11	31.87
15000	1.39	13.14
16000	1.47	11.99
18000	1.29	16.91
21000	1.41	31.36

### Typical Frequency Response



### Notes

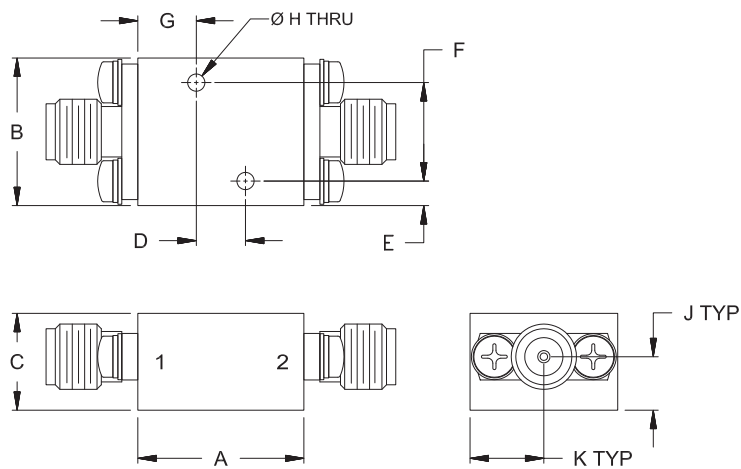
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## Coaxial Connections

PORT - 1	2.92mm-Female
PORT - 2	2.92mm-Female

## Outline Drawing



## Outline Dimensions ( $\frac{\text{inch}}{\text{mm}}$ )

A	B	C	D	E	F
.68	.60	.39	.200	.10	.400
17.1	15.2	10.0	5.08	2.5	10.16
G	H	J	K	Wt.	
.24	.070	.22	.30	grams	
6.0	1.78	5.5	7.6	24	

Note: Please refer to case style drawing for details

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