

Coaxial High Pass Filter

ZHFG-K4400+

50Ω 4900 to 16500 MHz



Generic photo used for illustration purposes only
CASE STYLE: UK3042

The Big Deal

- Good power handling, 3W
- Temperature stable
- Broadband connectorized package
- Good rejection, 48 dB typical

Product Overview

ZHFG-K4400+ is a 50Ω high pass filter built in broadband connectorized package. Covering 4900-16500 MHz bandwidth, these units offer good matching within the passband and good rejection in stopband. ZHFG-K4400+ offer low insertion loss, and good power handling capability. It handles up to 3W 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.
3W 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



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Connectors Model
2.92mm-F ZHFG-K4400+

+RoHS Compliant

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

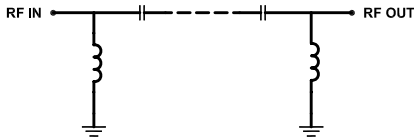
Features

- Very good rejection, 48dB typ.
- Temperature stable
- Good power handling, 3W

Applications

- Transmitters / Receivers
- Test and measurements
- Military applications
- Telecommunications and broadband wireless systems
- 5G Sub 6 GHz
- WiFi 6E and X-band Radar

Functional Schematic



Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Stop Band	Rejection Loss	DC-F1	DC - 3000	40	48	-	dB
		F1-F2	3000 - 3500	25	39	-	dB
	Freq. Cut-Off	F3*	4560	-	3	-	dB
Pass Band	Insertion Loss	F4-F5	4900 - 5300	-	2.0	-	dB
		F5-F6	5300 - 6100	-	1.6	2.5	dB
	Return loss	F4-F7	4900 - 16500	-	1.4	2.2	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

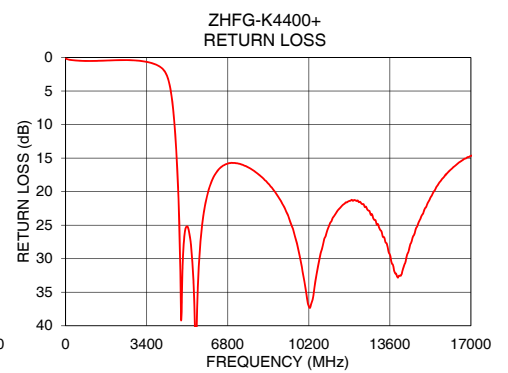
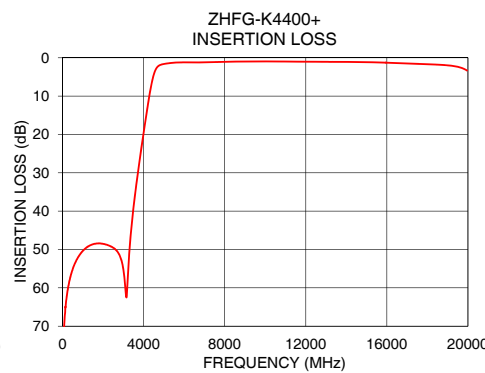
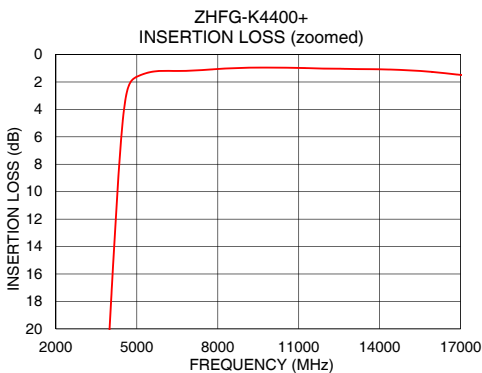
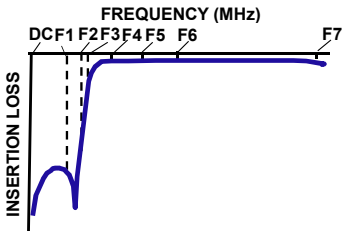
Operating Temperature	-55°C to 125°C
Storage Temperature	-55°C to 125°C
RF Power Input*	3W max. @25°C

*Passband rating, derate linearly to 0.6W 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	82.61	0.15
100	68.41	0.29
500	55.13	0.46
1000	50.38	0.51
2500	49.56	0.38
3000	55.18	0.45
3500	39.14	0.73
3720	29.94	0.96
4000	19.60	1.48
4400	6.60	4.82
4560	3.49	9.80
4900	1.73	31.57
5300	1.39	29.91
6100	1.19	18.65
8000	1.06	17.18
10000	0.95	33.11
12000	1.03	21.22
14000	1.08	32.56
15000	1.14	23.21
16500	1.38	15.65

Typical Frequency Response



Notes

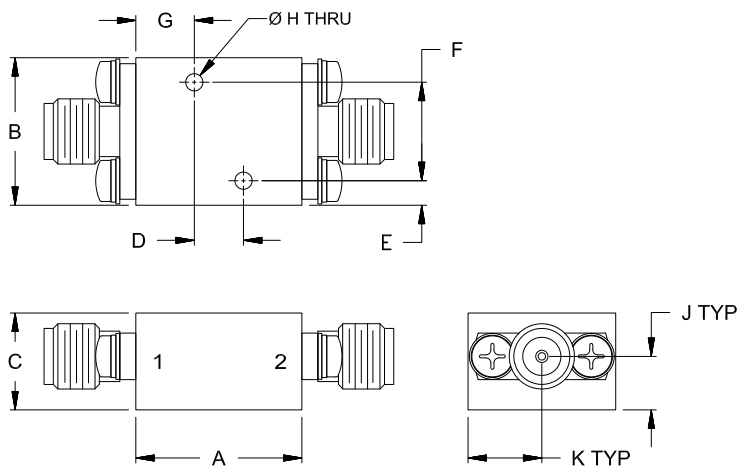
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Coaxial Connections

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

Outline Drawing



Outline Dimensions (inch / 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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