

Coaxial High Pass Filter

ZHFG-K3000+

50Ω 3400 to 13000 MHz



Generic photo used for illustration purposes only
CASE STYLE: UK3042

The Big Deal

- Good power handling, 4W
- Temperature stable
- Broadband connectorized package
- Good rejection, 30 dB typical

Product Overview

ZHFG-K3000+ is a 50Ω high pass filter built in Broadband connectorized package. Covering 3400-13000 MHz bandwidth, these units offer good matching within the passband and good rejection in stopband. ZHFG-K3000+ offer low insertion loss, and good power handling capability. It handles up to 4W 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.
4W 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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Features

- Temperature stable
- Good power handling, 4W

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Connectors Model
2.92mm-F ZHFG-K3000+

+RoHS Compliant

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

Applications

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

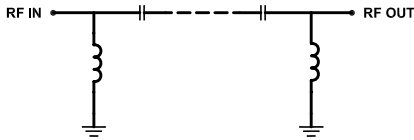
Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Stop Band	Rejection Loss	DC-F1	DC-2350	20	30	-	dB
	Freq. Cut-Off	F2*	3000	-	3.0	-	dB
Pass Band	Insertion loss	F3-F4	3400-4000	-	1.7	2.8	dB
		F4-F5	4000-11000	-	1.4	2.1	dB
	F5-F6	11000-13000	-	1.8	-	-	dB
Return Loss	F3-F6	3400-13000	-	11	-	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.

Functional Schematic



Maximum Ratings

Operating Temperature	-55°C to 125°C
Storage Temperature	-55°C to 125°C
RF Power Input*	4W max. @25°C

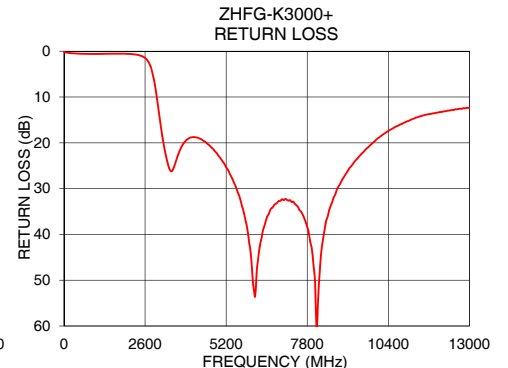
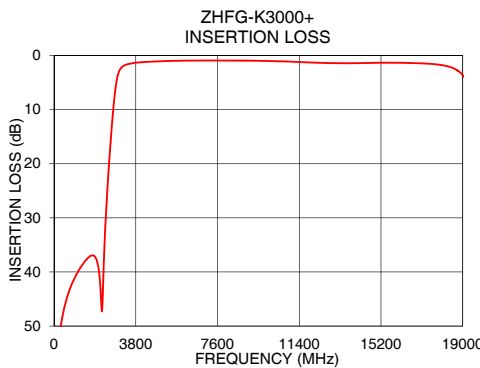
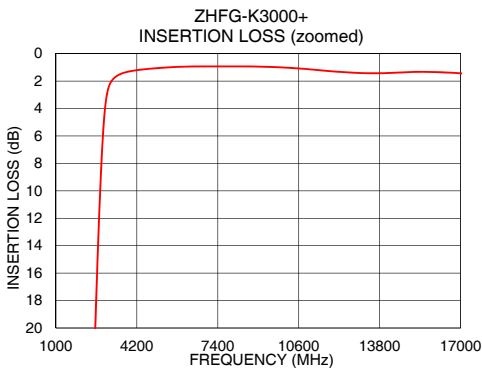
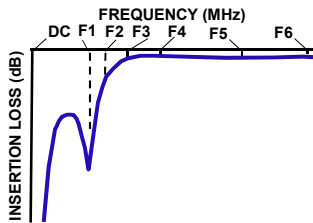
*Passband rating, derate linearly to 0.7W at 125°C ambient

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	82.89	0.17
100	59.48	0.32
500	46.20	0.54
900	41.58	0.59
1100	40.04	0.58
2000	38.05	0.56
2350	34.51	0.79
2390	31.06	0.84
2540	20.93	1.20
2730	10.93	2.57
3000	3.16	11.19
3400	1.64	25.97
4000	1.26	19.03
5000	1.06	23.20
6000	0.95	44.86
7000	0.93	32.31
8200	0.93	48.08
11000	1.14	15.32
12000	1.30	13.38
13000	1.41	12.41

Typical Frequency Response



Notes

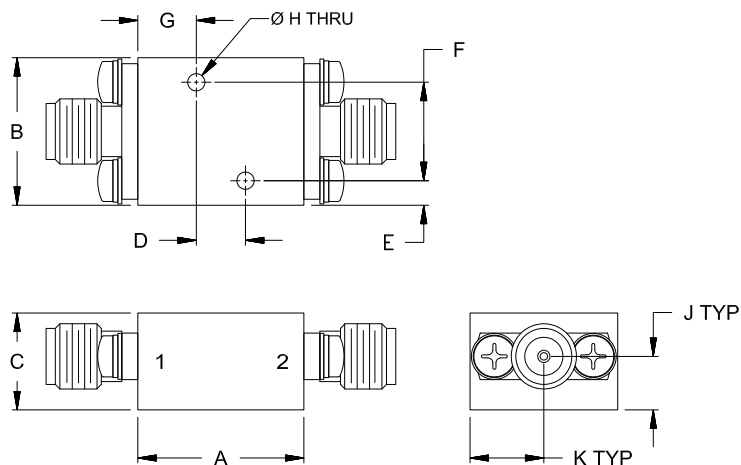
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Coaxial Connections

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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