

# Coaxial High Pass Filter

## ZHFG-K3800+

50Ω      4200 to 16000 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-K3800+ is a 50Ω high pass filter built in broadband connectorized package. Covering 4200-16000 MHz bandwidth, these units offer good matching within the passband and good rejection in stopband. ZHFG-K3800+ 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](http://www.minicircuits.com/MCLStore/terms.jsp)



# High Pass Filter

## ZHFG-K3800+

50Ω 4200 to 16000 MHz



### Features

- Very good rejection, 48dB typ.
- Temperature stable

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CASE STYLE: UK3042  
Connectors Model  
2.92mm-F ZHFG-K3800+

**+RoHS Compliant**

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

### Applications

- Test and measurements
- Military applications
- Telecommunications and broadband wireless system
- 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 - 2700	40	48	-	dB
		F1-F2	2700 - 3000	24	35	-	dB
	Freq. Cut-Off	F3*	3800	-	3.0	-	dB
Pass Band	Insertion Loss	F4-F5	4200 - 4700	-	1.7	-	dB
		F5-F6	4700 - 5500	-	1.3	2.1	dB
		F6-F7	5500 - 14000	-	1.1	1.9	dB
	Return Loss	F7-F8	14000 - 16000	-	1.4	2.4	dB
		F4-F8	4200 - 16000	-	14	-	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

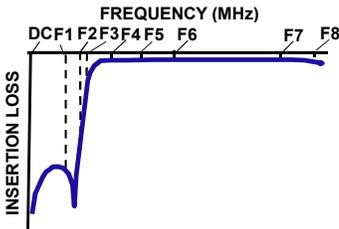
Operating Temperature	-55°C to 125°C
Storage Temperature	-55°C to 125°C
RF Power Input*	3W max. @25°C

\*Passband rating, derate linearly to 0.6W at 125°C ambient  
Permanent damage may occur if any of these limits are exceeded.

### Functional Schematic

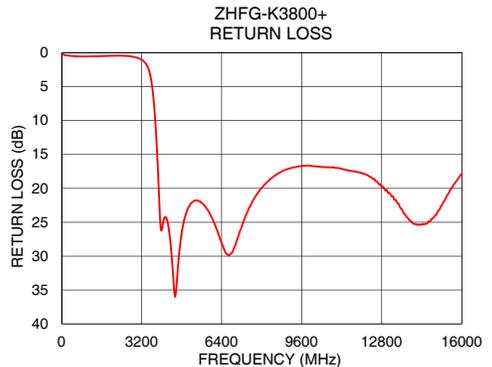
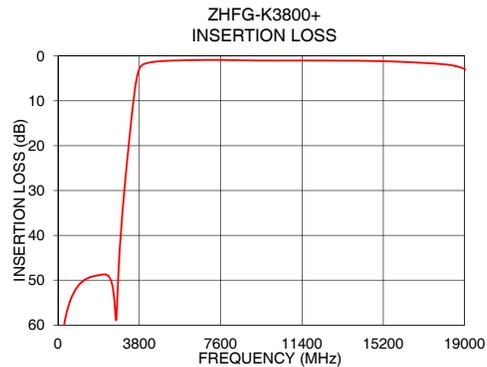
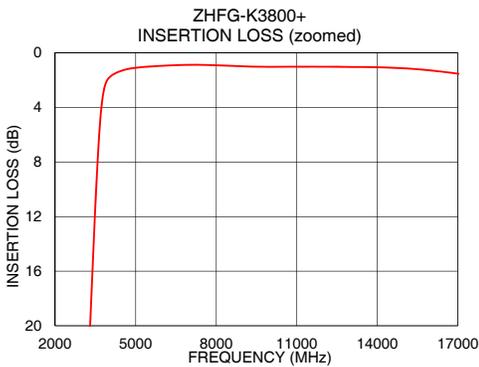


### Typical Frequency Response



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)
10	78.26	0.14
50	74.23	0.23
100	68.69	0.29
500	55.57	0.48
1000	50.94	0.54
2000	48.79	0.43
2700	58.65	0.49
3000	35.56	0.69
3100	29.98	0.82
3300	20.05	1.29
3520	10.23	2.88
3800	2.86	13.16
4200	1.53	24.49
4700	1.18	29.65
5000	1.09	23.50
5500	1.00	21.91
7000	0.87	27.74
10000	1.02	16.69
14000	1.05	24.99
16000	1.28	17.84



#### Notes

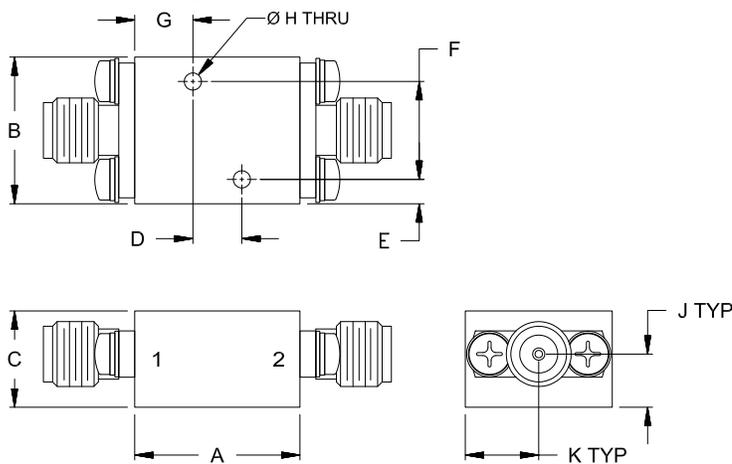
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## Coaxial Connections

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	<b>24</b>	

Note: Please refer to case style drawing for details

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