

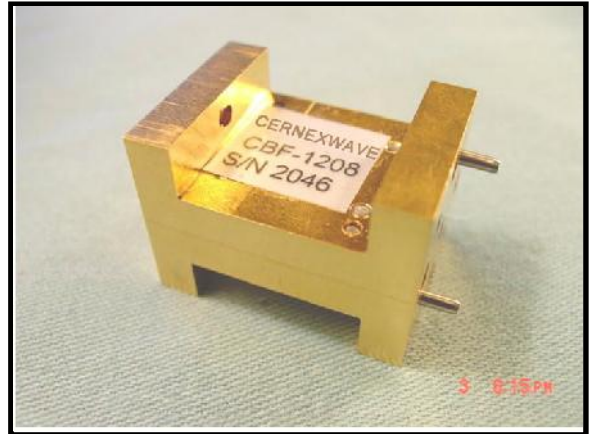
High Pass Filters (Waveguide & Coaxial)

FEATURES

- ❖ Up to 220GHz
- ❖ Low Cost
- ❖ Wide Bandwidths
- ❖ Low Insertions Loss
- ❖ Low In-Band VSWR

APPLICATIONS

- ❖ Side Band Filters
- ❖ Frequency Diplexers
- ❖ Telecommunications Systems



CHF SERIES

Cernexwave's **CHF Series High Pass Filters** use a simple yet effective waveguide cut-off filter technique. This design is useful for eliminating unwanted side bands in upconverters and out-of band frequencies in communication systems. These filters are small in size and compact by design. The CHF series can be designed for any frequency range from 0.1 to 220 GHz. Low insertion losses from 0.15 dB and cut off rejections of up to 80 dB are possible. Consult Cernexwave for dimensions due to the wide range of waveguide sizes and frequency ranges.

LC FILTERS*

Model Number	Passband (MHz)	Insertion Loss (dB)	Stopband (MHz)	Rejection (dB)	Size (mm)
CHF060040B	1100-6000	*	DC-950	40@DC-950	*
CHF080075B	3400-8100	*	DC-460	75@DC-460	40.4 x 12 x 10

SUSPENDED SUBSTRATE*

Model Number	Cutoff Frequency (MHz)	Insertion Loss (dB)	Stopband (MHz)	Rejection (dB)	Size(mm)
CHF050035B	1500-5000 (-1.5dB)	*	1000	35@1000MHz	149 x 34 x 10.5
CHF060040B	2300-6000 (-0.5dB)	*	1800	40@1800MHz	52 x 35 x 10

WAVEGUIDE*

Model Number	Waveguide Type	Passband (GHz)	Cut off Frequency (GHz)	Pass band Loss (dB)1	Stop band Rejection (dB)1
CHF422345-XX	WR-42	18 - 26.5	14 - 23	0.6	45
CHF283645-XX	WR-28	26.5 - 40	21 - 36	0.7	45
CHF224545-XX	WR-22	33 - 50	26 - 45	0.8	45
CHF195445-XX	WR-19	40 - 60	31 - 54	0.8	45
CHF156845-XX	WR-15	50 - 75	40 - 68	0.9	45
CHF128245-XX	WR-12	60 - 90	48 - 82	1	45
CHF1010045-XX	WR-10	75 to 110	59 - 100	1	45

*Other frequencies and custom designs available. Send your custom filter requirements to sales@cernexwave.com.



High Pass Filters (Waveguide & Coaxial)

TO ORDER A CUSTOM FILTER

1. Create a filter model number for your filter:

Waveguide Filters

CHF WG HF RJ-- XX

Where

CHF = High Pass Filter
WG = Waveguide Type
HF = High Passband Frequency
RJ = Rejection

Coaxial Filters

CHF HF IL RJ-- XX

Where

CHF = High Pass Filter
HF = High Passband Frequency
IL = Insertion Loss
RJ = Rejection

Example: A WR-28 High Pass Filter with a high end cut off frequency 29Ghz and a rejection of 40dB will be CHF282910-XX.

2. Send your customer filter model number, along with quantity and delivery requirements to sales@cernexwave.com.