

Miniature Highpass Filter

HMBC -150HJ
0.5 to 18 GHz

Small Size

Low Cost

Low VSWR

Extended Stopband Rejection



SPECIFICATIONS

Cut-off Frequency (f_c)	0.5 GHz
Passband	up to 18.0 GHz
Insertion Loss*	1.0 dB
VSWR	1.9:1
Rejection@ $0.5 f_c$	60 dB
Available Sizes (excluding connectors)	0.5" L x 0.5" W x 0.5" H (SMA female connectors)
	1.20" L x 0.31" Dia. (SMA female connectors)
	1.35" L x 0.31" Dia. (includes one male and female SMA connector)

* 1.0 dB max. above 0.75 GHz and 1.8 dB max.
at 0.5 GHz

DESCRIPTION The Microphase Highpass Filter is a breakthrough in filter technology. This miniature device discriminates a desired band of frequencies from all unwanted RF signals below a specified passband. The HMBC filter has uses in many types of military applications, including: EW, radar, and communications systems, as well as aerospace and weather satellite systems.

ADVANTAGES The main advantages of the Microphase designed and engineered HMBC Highpass Filter are its small size and excellent RF performance with extended stopbands. This filter has a cut-off frequency of 0.5 GHz with a passband to 18 GHz. Other important advantages are its excellent frequency and temperature stability, low insertion loss and VSWR and sharp selectivity. You get excellent electrical performance, environmental stability and mechanical reliability, and this unit can be adapted for custom configurations. Compact and very rugged, all of our products are 100% tested and readily available. This component can be designed to your specification.

This unit can be designed to your specification. Please contact Microphase for your special design requirements.

Miniature Highpass Filters

HBMC, HMCC, HMFP, HMBC

HBMC—SPECIFICATIONS

Cut-off Frequency (f_c)	0.25-4.0 GHz
Passband	up to 12.0 GHz
Insertion Loss	1.0 dB
VSWR	1.6:1
Rejection @ $0.75 f_c$	55 dB
Size (excluding connectors)	1.0" L x 0.5" W x 0.38" H
Connectors	SMA or Pins

HMCC—SPECIFICATIONS

Cut-off Frequency (f_c)	0.5-4.0 GHz
Passband	up to 26.0 GHz
Insertion Loss*	1.0 dB
VSWR	1.9:1
Rejection @ $0.5 f_c$	60 dB
Size (excluding connectors)	0.57" L x 0.31" Dia.
Connectors	SMA

HMFP—SPECIFICATIONS

Cut-off Frequency (f_c)	0.75-6.0 GHz
Passband	up to 18.0 GHz
Insertion Loss	1.2 dB
VSWR:	1.9:1 max.
Rejection @ $0.7 f_c$	60 dB
Size (excluding connectors)	0.53" L x 0.25" W x 0.15" H
Connectors	Pins

HMBC—SPECIFICATIONS

Cut-off Frequency (f_c)	0.5-4.0 GHz
Passband	up to 26.0 GHz
Insertion Loss *	1.0 dB
VSWR	1.9:1 max.
Rejection @ $0.5 f_c$	60 dB
Size (excluding connectors)	0.5" L x 0.5" W x 0.5" H
Connectors	SMA

* 1.0 dB max. above 0.75 GHz

Excellent RF Performance

Small Size

Low Cost

Low VSWR

Extended Passbands



DESCRIPTION The Microphase Highpass Filters are miniature devices which reject all unwanted RF signals below a specified passband. These filters have uses in many types of military applications including: EW systems, radar, aerospace and weather satellite systems.

ADVANTAGES The main advantages of the Microphase designed and engineered Highpass Filters are their small size and excellent RF performance with extended passbands (narrow or wide). Other important advantages are their excellent frequency flatness, low Insertion Loss and VSWR and sharp selectivity. You get excellent electrical performance, mechanical reliability and environmental stability. These units can be adapted for custom configurations. Compact and very rugged, all of our products are 100% tested, and readily available.

These units can be designed to your specification. Please contact Microphase for your special design requirements.

Miniature Bandpass Filters

BCLC, BCTP, BSMC, BNHC

Filters

Excellent RF Performance

Small Size

Low Cost

Low Insertion Loss and VSWR

Extended Stopband



DESCRIPTION The Microphase Bandpass Filters are miniature devices which discriminate between a desired band of frequencies from unwanted frequencies. These filters have uses in many types of military applications including: EW systems, radar, aerospace and navigation systems, as well as communication and weather satellite systems.

ADVANTAGES The main advantages of the Microphase designed and engineered Bandpass Filters are their small size and excellent RF performance with extended stopbands. Other important advantages are their excellent frequency flatness, low insertion loss and VSWR and sharp selectivity. You get excellent electrical performance, mechanical reliability and environmental stability. These units can be adapted for custom configurations. Compact and very rugged, all of our products are 100% tested, and readily available. These components can be designed to your specification.

BCLC—SPECIFICATIONS

Center Frequency (f_o)	0.5-4.0 GHz
3 dB Bandwidth	25-80%
Insertion Loss*	
Rejection*	
VSWR	1.7:1
Size (excluding connectors)	0.75" L x 0.63" W x .025" H
Connectors	SMA or Pins

BCTP—SPECIFICATIONS

Center Frequency (f_o)	1.0-5.0 GHz
3 dB Bandwidth	5-25%
Insertion Loss*	
Rejection*	
VSWR	1.6:1
Number of Sections	2-6
Weight	2.5 gram
Size (excluding connectors)	0.53" L x 0.25" W x .015" H
Connectors	Pins

BSMC—SPECIFICATIONS

Center Frequency (f_o)	0.5-4.0 GHz
3 dB Bandwidth	30-90%
Insertion Loss @ f_o	1.6 dB max.
Rejection	60 dB 30% from band edges
VSWR	1.7:1
Size (excluding connectors)	1.0" L x 0.5" W x 0.38" H
Connectors	SMA or Pins

BNHC—SPECIFICATIONS

Center Frequency (f_o)	0.5-5.0 GHz
3 dB Bandwidth	2-10%
Insertion Loss*	
Rejection*	
Number of Sections	2-5
VSWR	1.5:1
Size (excluding connectors)	1.5" L x 0.5" W x 0.50" H
Connectors	SMA or Pins

* Insertion Loss and rejection are dependent on bandwidth and number of sections.

These units can be designed to your specification. Please contact Microphase for your special design requirements.

Miniature Lowpass Filters

LMBC, LMCC, LMFP, LBMC

LMBC—SPECIFICATIONS

Cut-off Frequency (f_c)	0.5-5.0 GHz
Passband	up to 5.0 GHz
Insertion Loss	1.2 dB max.
VSWR	1.8:1
Rejection @ $2 f_c$	60 dB
Size (excluding connectors)	0.5" L x 0.5" W x 0.5" H
Connectors	SMA

LMCC—SPECIFICATIONS

Cut-off Frequency (f_c)	0.5-5.0 GHz
Passband	up to 5.0 GHz
Insertion Loss	1.2 dB max.
VSWR	1.9:1
Rejection @ $2 f_c$	60 dB
Size (excluding connectors)	0.57" L x 0.31" Dia.
Connectors	SMA

LMFP—SPECIFICATIONS

Cut-off Frequency (f_c)	0.7-6.0 GHz
Passband	up to 6.0 GHz
Insertion Loss	1.4 dB max.
VSWR	1.6:1
Rejection @ $1.3 f_c$	60 dB
Size (excluding connectors)	0.53" L x 0.25" W x 0.15" H
Connectors	Pins

LBMC—SPECIFICATIONS

Cut-off Frequency (f_c)	0.5-4.0 GHz
Passband	up to 4.0 GHz
Insertion Loss	1.0 dB
VSWR	1.5:1
Rejection @ $1.25 f_c$	55 dB
Size (excluding connectors)	1.0" L x 0.50" W x 0.38" H
Connectors	SMA or Pins

Excellent RF Performance

Extremely Small Size

Low Cost

Low VSWR

Extended Stop Bandpass Features



DESCRIPTION The Microphase Lowpass Filters are miniature devices, which reject all unwanted RF signals above a specified passband. These filters have uses in many types of military applications including: radar systems, airborne navigation, electronic warfare and communications systems.

ADVANTAGE The main advantages of the Microphase designed and engineered Lowpass Filters are their small size and excellent RF performance with extended stop bandpass features. Other important advantages are their excellent frequency flatness, low insertion loss and VSWR and sharp selectivity. You get excellent electrical performance, mechanical reliability and environmental stability. These units can be adapted for custom configurations. Compact and very rugged, all of our products are 100% tested, and readily available.

These units can be designed to your specification. Please contact Microphase for your special design requirements.