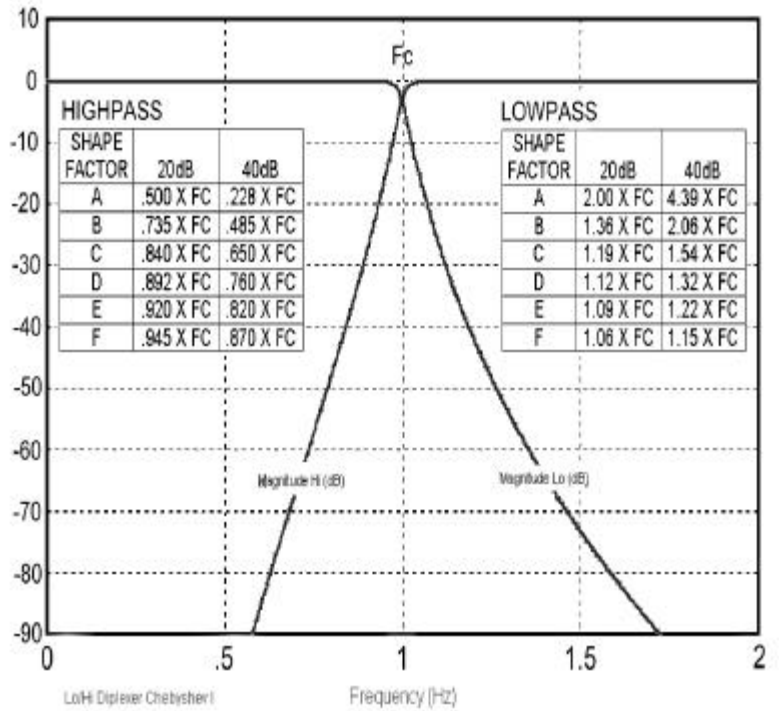


# LOW-HIGH DIPLEXERS

Diplexers are three-port frequency selective devices that may be used as a separator or a combiner of signals. The low-high diplexers manufactured by Allen Avionics consist of two filters sharing a common port. The common port and the output of the two filters (low and high) or (RX and TX) form the three terminals of the diplexer. Signals applied to the common port are separated in accordance with the passband frequencies of the filters.

ALLEN AVIONICS offers 6 different shape factors for the contiguous Low-High Diplexer series. For each shape factor a simple multiplication from the data listed in the table to the right will give you the frequencies for the 20dB & 40Db attenuation points. There are many choices for the custom packaging of diplexers which, includes surface mount, flat pack, through hole or in metal cases with connectors as listed in the table below. BNC or SMA connectors are both available.



Cut-Off (Fc) Frequency Range	Impedance Range Ohms	Shape Factor	Size (Inches)
10KHz To <100KHz	200 TO 5K OHMS	A	4 x 3 x 1 1/4
		B	4 x 3 x 1 1/4
		C	5 x 3 x 1 1/4
		D	6 x 3 x 1 1/4
>100KHz TO <500KHz	50 TO 5K OHMS	A	4 x 2 x 1 1/4
		B	4 x 2 x 1 1/4
		C	5 x 2 x 1 1/4
		D	5 x 2 x 1 1/4
>500KHz TO <1.0MHz	50 TO 600 OHMS	E	6 x 2 x 1 1/4
		A	4 x 2 x 1 1/4
		B	4 x 2 x 1 1/4
		C	5 x 2 x 1 1/4
		D	5 x 2 x 1 1/4
		F	6 x 2 x 1 1/4
>1.0MHz TO <5.0MHz	50 TO 75 OHMS	A	3 x 2 x 1 1/4
		B	3 x 2 x 1 1/4
		C	4 x 2 x 1 1/4
		D	4 x 2 x 1 1/4
		E	4 x 2 x 1 1/4
		F	4 x 2 x 1 1/4
>5.0MHz TO <10MHz	50 TO 75 OHMS	A	3 x 2 x 1 1/4
		B	3 x 2 x 1 1/4
		C	4 x 2 x 1 1/4
		D	4 x 2 x 1 1/4
		E	5 x 2 x 1 1/4
		F	5 x 2 x 1 1/4

Cut-Off (Fc) Frequency Range	Impedance Range Ohms	Shape Factor	Size (Inches)
>10MHz To <10MHz	50 TO 75 OHMS	A	3 x 2 x 1 1/4
		B	3 x 2 x 1 1/4
		C	4 x 2 x 1 1/4
		D	4 x 2 x 1 1/4
		E	5 x 2 x 1 1/4
		F	5 x 2 x 1 1/4
>10MHz To <25MHz	50 OHMS	A	3 x 2 x 1 1/4
		B	3 x 2 x 1 1/4
		C	4 x 2 x 1 1/4
		D	4 x 2 x 1 1/4
		E	5 x 2 x 1 1/4
		F	5 x 2 x 1 1/4
>25MHz To <100MHz	50 OHMS	A	3 x 2 x 1 1/4
		B	3 x 2 x 1 1/4
		C	4 x 2 x 1 1/4
		D	4 x 2 x 1 1/4
		E	5 x 2 x 1 1/4
		F	5 x 2 x 1 1/4
>100MHz To <200MHz	50 OHMS	A	3 x 2 x 1 1/4
		B	3 x 2 x 1 1/4
		C	4 x 2 x 1 1/4
		D	4 x 2 x 1 1/4
		E	5 x 2 x 1 1/4
>200MHz To <250MHz	50 OHMS	A	3 x 2 x 1 1/4
		B	3 x 2 x 1 1/4
		C	4 x 2 x 1 1/4
		D	4 x 2 x 1 1/4