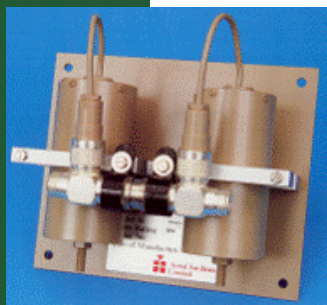


# Notch Reject Filters



Notch filters are designed for elimination of the many specific interference problems that may be experienced at radio sites. When used in conjunction with other products, DrawCom Notch Reject Filters facilitate incorporation of combination pass and reject band response curves for a system. Notch frequencies are adjusted at the factory to customers' requirements.

There are three types of Notch Reject Filters, helical type, offering a higher Q. a tubular cavity version for narrower notch bandwidth, designed for solution of the more difficult interference problems, and compact combine form of line resonator for operation up to 2GHz. Depending on product category, stop to pass frequencies range from 500kHz to 4MHz.

The main application of the helical version will be for sites where interference spacing is of the order of 1MHz, but such a bandwidth is at some cost to insertion loss. Where a greater notch bandwidth is possible for given situations the insertion loss will correspondingly improve.

- Range covers 68-2000 MHz
- High rejection
- Low loss
- Tuneable
- High Q

### Specifications: Tubular Cavity Notch Reject Filters

Type	2 Section	2 Section	2 section	4 section
Within The Range (MHz)	60-1800	180-500	800-1000	800-1000
Notch Bandwidth ( kHz)	200	200	500	1000
Insertion Loss (dB)	0.5 max	0.5 max	0.5	1.0
Isolation (dB)	>40	>40	35	80
VSWR (in Passband)	< 1.2:1	< 1.2:1	< 1.2: 1	< 1.2:1
Impedance (ohm)	50	50	50	50
Power Rating CW (W)	100	100	100	100
Temperature Range (°C)	-20 to +55	-20 to +55	-20 to +55	-20 to +55
Connectors	Type-N F-F	Type-N F-F	Type-N F-F	Type-N F-F

## Notch Reject Filters (cont.)

### Specifications: Helical Notch Reject Filters

Type	2 Section	2 Section	2 Section	2 Section
Within The Range (MHz)	60-180	180-500	180-500	60-180
Notch Bandwidth (KHz)	2000	2000	500	500
Insertion Loss (dB max)	0.5	0.5	0.5	0.5
Rejection (dB min)	40	40	40	40
VSWR (in Passband)	1.2:1	1.2:1	1.2:1	1.2:1
Impedance (ohms)	50	50	50	50
Power Rating CW (W)	100	100	400	400
Temperature Range (°C)	-20 to +55	-20 to +55	-20 to +55	-20 to +55
Connectors	N type F-F	N type F-F	N type F-F	N type F-F

### Specifications: Helical Notch Reject Filters (High Power)

Type	1 section	2 section	3 section	4 section
Within The Range (MHz)	450-470	450-470	450-470	450-470
Notch Bandwidth (KHz)	200	350	350	200
Insertion Loss (dB max)	0.2	0.4	0.6	0.9
Rejection (dB min)	25	47	75	90
VSWR (in Passband)	1.2: 1	1.2: 1	1.2: 1	1.2: 1
Impedance (ohms)	50	50	50	50
Power Rating CW (W)	500	500	500	500
Temperature Range (°C)	-20 to +55	-20 to +55	-20 to +55	-20 to +55
Connectors	N type F-F	N type F-F	N type F-F	N type F-F