

## Harmonic Rejection Filters



DrawCom's Harmonic Rejection Filters are generally of the "Waffle-Iron" type. Their prime application is for transmitter harmonic suppression in Satellite Earth Stations or terrestrial microwave links and for harmonic suppression in broadband measuring test equipment.

The High Power Harmonic Reject Filters combine high power handling with low insertion loss and high harmonic rejection.

The tables give an indication of capability with these filters. We also have a significant number of other designs and DrawCom can happily accommodate customer specified filters.

**Harmonic Rejection Filters (Low and Medium Power)**

Part No.	Waveguide Size	Passband Operating Frequency (GHz)	Minimum Return Loss (dB)	Maximum Insertion Loss (dB)	Minimum 2 <sup>nd</sup> Harmonic Rejection (dB)
M0942-0	WR229	3.700 – 4.200	32	0.25	60
M1611-1	WR159	5.925 – 6.425	32	0.15	70
M1078-0	WR137	5.850 – 6.500	23	0.20	60
M1150-1	WR112	7.900 – 8.400	26	0.12	60
M1097-1	WR75	14.000 – 14.500	23	0.15	55
M1097-2	WR75	12.200 – 12.700	23	0.15	55
M1097-3	WR75	10.700 – 12.250	23	0.15	55
M1097-4	WR75	11.700 – 13.250	23	0.15	55
M1097-5	WR75	12.000 – 12.500	23	0.15	55
M1097-6	WR75	11.000 – 12.700	23	0.15	55
M2234-0	WR42	18.500 – 21.500	20	0.50	40
M2335-0	WR28	28.000 – 32.000	17	0.80	40
M2266-0	WR28	27.900 – 30.000	20	0.40	50

**Harmonic Rejection Filters (High Power)**

Part No.	Waveguide Size	Passband Operating Frequency (GHz)	Passband Return Loss (min dB)	Passband Insertion Loss (max dB)	2 <sup>nd</sup> Harmonic Rejection (min dB)	Power Handling (W)
M2558	WR430	1.700 – 1.900	23	0.15	50	3000
M1611-2	WR159	5.925 – 6.425	32	0.15	70	3500
M1078-2	WR137	5.850 – 6.50	23	0.20	60	3500
M1150-2	WR112	7.900 – 8.400	26	0.12	60	3500