



# MFC

Microwave Filter Company, Inc.

Creating Filters and Components to 50 Ghz for Over 50 Years!

## C-Band Interference Elimination Filters

Series 7894D



Historically, the solution for eliminating **out-of-band** interference (e.g. - RADAR) has been to install a highly-selective bandpass filter. Specifically, a filter with a passband corresponding to that region's standard footprint (i.e. - **3700-4200 MHz**, **3400-4200 MHz**, etc.).

However, not long ago, WiMAX began operating in the (**3400-3800**) MHz frequency band in many regions around the world. This **common band** operation causes **in-band** interference at C-band receive sites that cannot be eliminated with "standard footprint" BPFs.

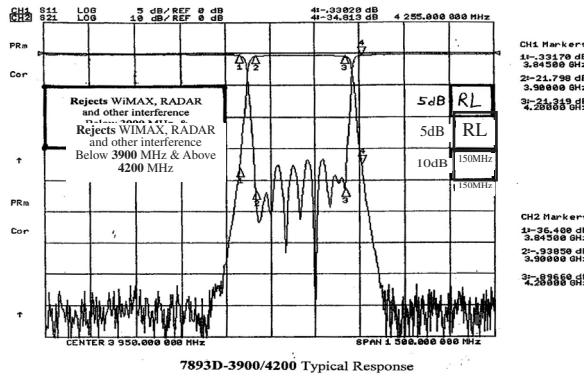
**Example :** WiMAX - operating at **3700** MHz - causes interference at a C-band receive site (where the footprint is **3700-4200** MHz). A standard footprint BPF will pass **all** frequencies from 3700-4200 MHz (i.e. - **including** the interfering WiMAX signal).

**Solution :** Install an MFC model **7893D-3780/4200** bandpass filter that will provide **30 dB rejection** at **3700** MHz and will pass all remaining C-band from (**3780-4200**) MHz.

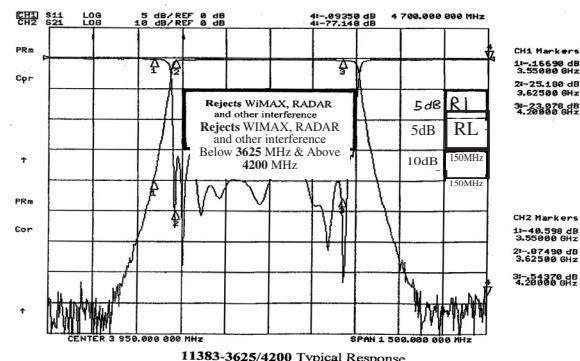
- **Low Insertion Loss – Typically less than 1 dB**
- **Also Rejects Transmit Band (5800-6725 MHz) >70 dB Typ – Eliminating the need for a separate TRF**
- **Low Group Delay Variation - 8 nS Max**
- **Compact Size – For easy installation on single or multi-feed LNBs**
- **Superior VSWR Performance - 1.5:1 Max**
- **Quick Turnaround – Most orders ship within (1-5) days ARO**

Following are just some of our many filtering solutions for eliminating WiMAX, RADAR and other C-band interference :

Model Number	Passband (MHz)	LOWER Rejection (Min./Typ. dB)	UPPER Rejection (Min./Typ. dB)
7893D-3400/4200	3400-4200	25/30 dB @ 3300 MHz	25/30 dB @ 4300 MHz
11383-3550/4150	3550-4150	25/- dB @ 3500 MHz	25/- dB @ 4200 MHz
11383	3600-4200	~-25 dB @ 3550 MHz ~-45 dB @ 3500 MHz	~-25 dB @ 4250 MHz 70/- dB @ 4400 MHz
11383-3625/4200	3625-4200	10/13 dB @ 3600 MHz 25/- dB @ 3575 MHz ~-40 dB @ 3550 MHz	~-20 dB @ 4285 MHz ~-40 dB @ 4255 MHz 60/- dB @ 4400 MHz
7893D-3665/4165	3665-4165	25/30 dB @ 3615 MHz 60/65 dB @ 3515 MHz 70/80 dB @ 3465 MHz	25/30 dB @ 4215 MHz 60/70 dB @ 4315 MHz 70/80 dB @ 4365 MHz
7893D	3700-4200	25/- dB @ 3650 MHz 60/70 dB @ 3550 MHz 70/80 dB @ 3500 MHz	25/- dB @ 4250 MHz 60/70 dB @ 4350 MHz 70/80 dB @ 4400 MHz
7893D-3740/4160	3740-4160	~-25 dB @ 3690 MHz ~-40 dB @ 3650 MHz	~-25 dB @ 4210 MHz ~-40 dB @ 4250 MHz
7893D-3780/4200	3780-4200	10/- dB @ 3725 MHz 30/- dB @ 3700 MHz 50/- dB @ 3650 MHz	30/- dB @ 4235 MHz 60/- dB @ 4400 MHz
7893D-3900/4200	3900-4200	30/35 dB @ 3845 MHz	30/35 dB @ 4255 MHz



7893D-3900/4200 Typical Response



11383-3625/4200 Typical Response

ALL MFC PRODUCTS ARE MADE IN THE USA

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