



# C-Band Radar Elimination Filters

Series 7893D/7894D

(Compatible With Digital LNB's)

**Eliminate Out-of-Band Interference at your C-Band Receive Antenna**



Series 7893D (7894D)

- **Low Insertion loss**
- **Low Group Delay Variation - Typically  $\leq 8$  ns** (Ideal for Digital Applications)
- **Economical Price**
- **Quick Delivery** (Stock to 1 Week)
- **Less Than 6 inches Long** (Fits Under Standard Weather Housing)
- **Also rejects transmit band (5.8 - 6.5 GHz) - eliminating the need for a separate transmit reject filter**

**With low insertion loss and minimal group delay variation, the series 7893D (7894D) is ideal for digital applications.**

## Specifications:

Passband:	3.7 - 4.2 GHz
Insertion Loss:	0.4 dB Typ at Fo 0.5 dB roll off at band edge
VSWR:	1.5:1 Typ (7893D)
Return Loss:	14 dB Typ (7893D)
VSWR:	1.33:1 Max (7894D)
Return Loss:	17dB Min (7894D)
Group Delay Variation:	Less than 8 ns Typ
Rejection:	
25 dB Min	3.65/4.25 GHz
60 dB Min	3.55/4.35 GHz
70 dB Min	3.50/4.40 GHz

## Mechanical Specifications:

Weight:	2.6 lbs.
Dimensions:	5 3/4" L x 2 3/4" H x 3 7/8" D
Flanges*:	CPR229G (Input) CPR229F (Output)

\* Half gasket is supplied with each model

The Series 7893D (7894D) copper waveguide bandpass filter is installed between the feedhorn and the LNB to suppress strong out-of-band interference caused by various radar systems (including AWACS).

Coastal and marine navigational radar frequencies (2.9-3.65 GHz) are just below the receive band and frequently wipe-out transponders 1-5 on satellite dishes installed near harbors. The airport altimeter band (4.25-4.40 GHz) will affect channels 22-24 on satellite dishes located near airports.

Since these filters are installed before down-conversion, saturation of the LNB is prevented allowing clean reception of the entire C-band.

**Custom bandwidths available upon request**

