



# CF7W UHF (470 to 600 MHz) Bandpass Filters

## CF7W 470-600 CF7W 470-600/617

Models **CF7W 470/600** and **CF7W 470/600/617** are designed to pre-select the UHF band for Off-the-Air TV receive systems.

Model **CF7W 470/600** passes 470 to 600 MHz spectrum, suppress signals from 5-440 MHz, and, 640 to 1000 MHz.

Model **CF7W 470/600/617** passes 470 to 600 MHz spectrum, suppress signals from 5-440 MHz, and, 617 to 1000 MHz; ( 617-700 MHz is intended for Band 71, LTE)

See sample graphs below.

### Specifications:

- Passband Insertion Loss: <1.5 dB (except <3.0 dB at band edges)
- Pass band Input Return Loss: >15 dB typical
- CF7W-470/600/617 rejects band 71 (LTE) - see graphs
- Temperature stable from -10° to +40° C
- RF Power handling up to 2 watts
- Indoor enclosure with 75 ohms F connectors ( female)
- Supplied with final production graph.

### CF7W Options:

**Enclosure:** Indoor, Outdoor, or, Rack Mount

#### Custom Pass band

**Specify** “Lower and Upper” 3dB cutoff frequencies (e.g., CF7W-500/650—3dB cutoff 500 and 650 mHz). Approx 6% frequency transition between passband edge and 40 dB stopband. Increased bandpass selectivity available with external filters.

#### Impedance and Connectors :

75 ohms connector options:

F type female/ male, BNC female/male

50 ohms connector options:

SMA, BNC, or N female/male

### CF7W-470/600

Dim (in): 4.0 x 2.5 x 2



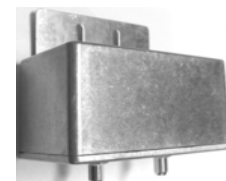
### CF7W-470/600/617

Dim (in): 7.5 x 2 x 1.75



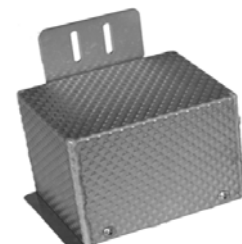
### CF7WX-470/600

Outdoor enclosure  
Dim (in): 4.5 x 3.5 x 2.5



### CF7WX-470/600/617

Outdoor enclosure  
Dim (in): 6.5 x 6.5 x 4.5



### CF7W-470/600/617 RM

1.75 x 19 “ Rack or Wall Mount



### Order as:

#### Indoor model:

CF7W-470/600 or CF7W-470/600/617

#### Outdoor Model

CF7WX-470/600 or CF7WX-470/600/617

#### Rack Mount Model

CF7W-470/600 RM or CF7W-470/600/617 RM

#### Option: Connector/Impedance (CI)(Affix CI to model #):

Ex 1: CF7W-470/600 B50 ( BNC 50 ohms)

Ex 2: CF7WX-470/600 B50 ( Outdoor, BNC 50 ohms)

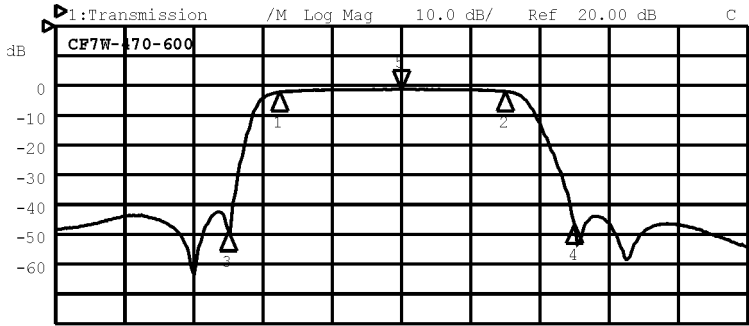
Ex 3: CF7W-470/600/617 RM N50 (rack mount, N 50 ohms )



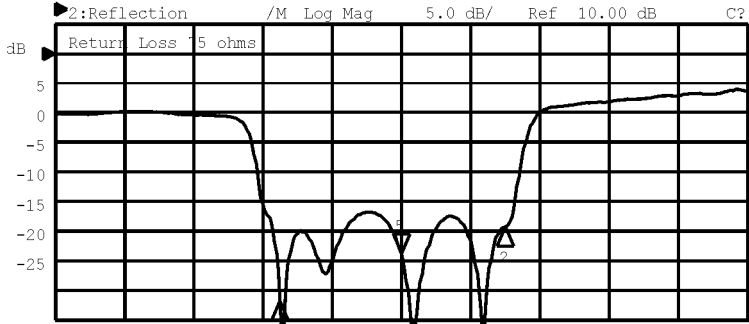


# Example Graphs of CF7W Series UHF Bandpass Filters

### CF7W-470/600 (ch.14-35)



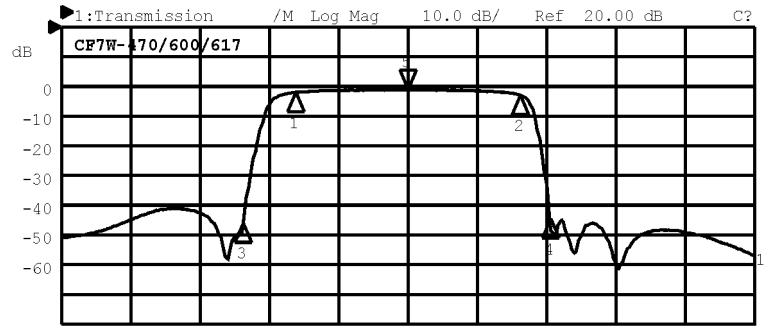
Center 540.000 MHz Span 400.000 MHz



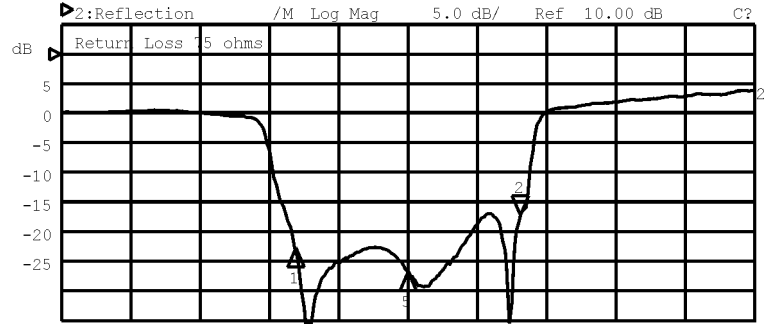
Center 540.000 MHz Span 400.000 MHz

| 1:Mkr (MHz) | dB      | 2:Mkr (MHz) | dB      |
|-------------|---------|-------------|---------|
| 1: 470.0000 | -2.144  | 1: 470.0000 | -31.675 |
| 2: 600.0000 | -1.930  | 2: 600.0000 | -19.257 |
| 3: 440.0000 | -49.098 |             |         |
| 4: 640.0000 | -46.729 |             |         |
| 5> 540.0000 | -1.332  | 5> 540.0000 | -23.850 |

### CF7W-470/600/617 (ch.14-35), attenuate 617 MHz and above.



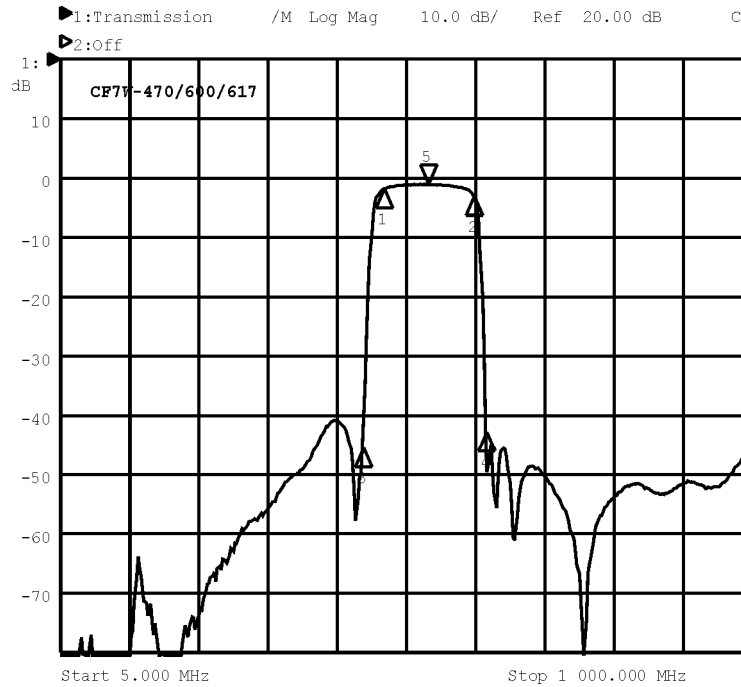
Center 535.000 MHz Span 400.000 MHz



Center 535.000 MHz Span 400.000 MHz

| 1:Mkr (MHz) | dB      | 2:Mkr (MHz) | dB      |
|-------------|---------|-------------|---------|
| 1: 470.0000 | -1.985  | 1: 470.0000 | -22.758 |
| 2: 600.0000 | -2.941  | 2> 600.0000 | -17.292 |
| 3: 440.0000 | -45.857 |             |         |
| 4: 617.0000 | -44.549 |             |         |
| 5> 535.0000 | -1.233  | 5: 535.0000 | -26.684 |

### CF7W-470/600/617 (ch.14-35), attenuate 617 MHz and above.



Start 5.000 MHz Stop 1 000.000 MHz

| 1:Mkr (MHz) | dB      | 2:Mkr (MHz) | dB |
|-------------|---------|-------------|----|
| 1: 470.0000 | -1.865  |             |    |
| 2: 600.0000 | -2.984  |             |    |
| 3: 440.0000 | -45.408 |             |    |
| 4: 617.0000 | -42.811 |             |    |
| 5> 535.0000 | -1.107  |             |    |

