



CR7-HT Series: Bandstop or Notch Filter

CR7-HT Series filters are designed for TV/RF signal interference applications in the UHF band (400 to 900 MHz). These filters have high frequency selectivity and can be used where there are adjacent channels.

Applications

- Use to reject signal interference in receive system
- Use to reduce sideband noise out of signal generator

Models

CR7-HT contains 2 notches which are unusually combined together for one deep notch. Example graph 1 shows tunable CR7-HT, model VR7-HT

CR7D-HT contains 4 notches which can be combined for deep and wide notch or 4 -6 MHz stopband. Example graph 2 shows video carrier notch, 1 Mhz wide. Example graph 3 shows 6 MHz stopband.

CR7T-HT contains 6 notches combined for deep bandstop (50 dB, 4-6 Mhz wide). Example graph 4 shows outdoor channel "deletion" application.

Bandstop (CR7D-ch.# HT, CR7T-ch.# HT)

TV Bandstop available for ch.14 to 69, NTSC or ATSC
RF Bandstop 1 to 10 Mhz bandwidth

Highly Selective stopband with 20-45 dB attenuation can pass adjacent channel (3-4 dB loss at 1.5 MHz from stopband)

Inquire for special tune bandstop

Notch (CR7-Fo HT, CR7D-Fo HT)

Fixed Frequency - specify from 400 to 900 MHz

Configure notches together for highly selective notch that can pass any adjacent frequency, $F_o \pm 1.5$ MHz.

Rejection single frequency: from 15 to 80 dB

Rejection single notch 5 to 15 dB

Notch width: 0.15 to 1.5 MHz

General Specifications

Connectors: F type, 75 ohm impedance (standard)
CR7-HT series is recommend for indoor operation, however, outdoor aluminum enclosure is available

RF Power Handling: 2 watts

Weight: from 1 to 3 lbs

Dimensions:

CR7-HT: 4.25 x 1.75 x 4 (in)

CR7D-HT: 7 x 6 x 3.5(in)

CR7T-HT: 7 x 6 x 3.5 (in)

Outdoor : 6.75 x 6.5 x 4.5 (in), Wt: 1 lb (enclosure only)

Operating bandwidth: 5 to 800MHz 1000 MHz -inquire

Passband insertion loss: < 1dB \pm .5 dB



CR7-HT Single notch with fine tune option

CR7D-HT Bandstop or Deep Notch(s)

CR7-HT Series Outdoor Weatherized Aluminum enclosure

CR7T-HT Deep Bandstop

Customizing model CR7-HT to your needs:

Bandstop Response

Specify channel or frequencies of the stopband

Specify attenuation

Selectivity - specify adjacent signals to pass, or, the 3 dB BW

Notch Response

Specify number of notches

Specify fixed frequency or adjustable frequency

-Adjustable model has tunable range of 100 MHz

-Fine tune model has tunable range $F_o \pm 1$ MHz

Specify Notch depth (from 15 to 65 dB)

Specify notch width (up to 1 MHz)

General

Impedance: 50 ohm option

Connectors: BNC, N, or SMA options

Bandwidth: 5 to 800 or 1000 Mhz option

Indoor or Outdoor enclosure -Indoor operation is recommended

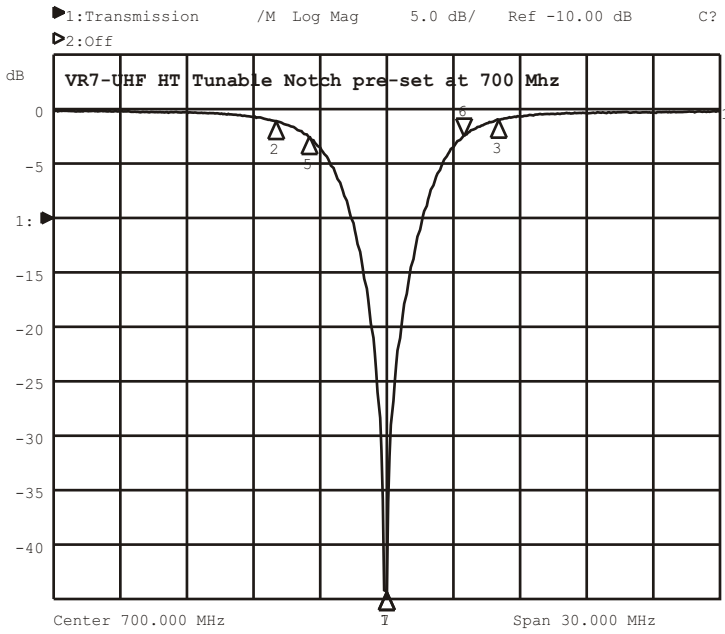
Ordering Info: order as CR7 (Fo) HT; CR7D-(Fo) HT or CR7D-ch.# HT; CR7T-ch.# HT

To obtain most appropriate filter to meet your needs, forward application and frequency/channel number information to www.info@tinlee.com for prompt quotation



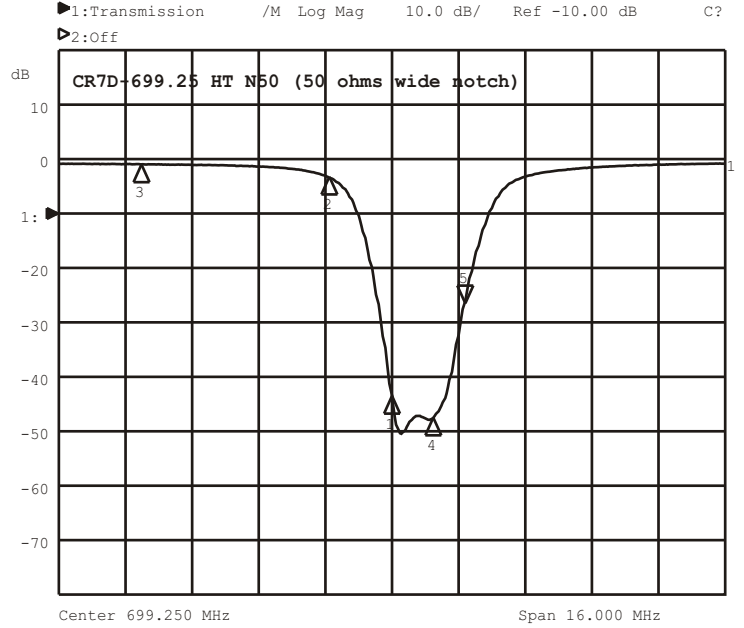
Example CR7-HT series UHF Notch and Bandstop Graphs

Graph 1: VR7-HT-700MHz (tunable single notch)
Tunable 700 Mhz notch (>40 dB) with 3 dB BW \pm 3.5 Mhz



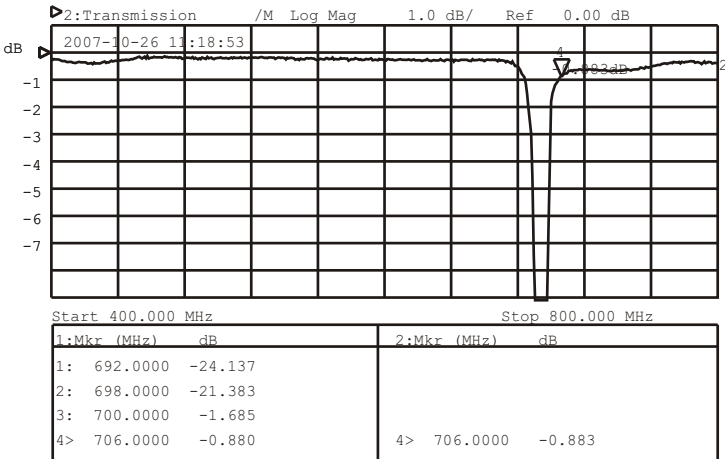
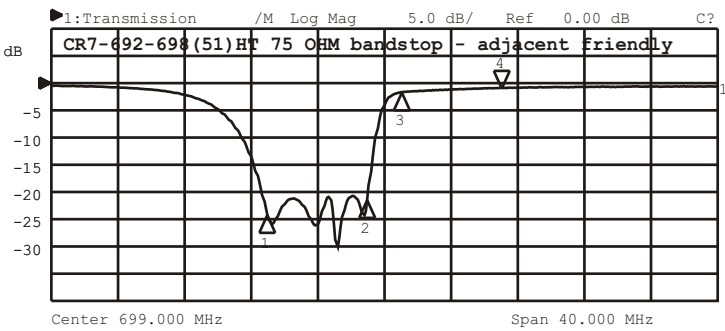
1:Mkr (MHz)	dB	2:Mkr (MHz)	dB
1: 700.0000	-44.319		
2: 695.0000	-1.099		
3: 705.0000	-0.976		
5: 696.5000	-2.541		
6> 703.5000	-2.452		

Graph 2: CR7D-HT-ch.52T - double notch
Trap CH.52 Video interference, pass adjacent ch. 51



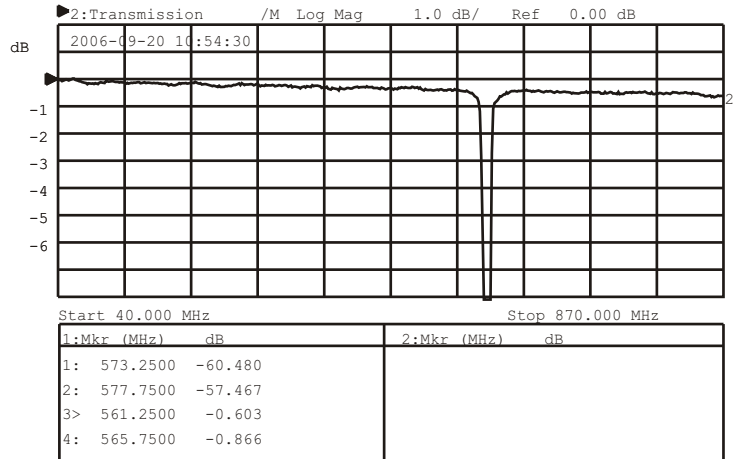
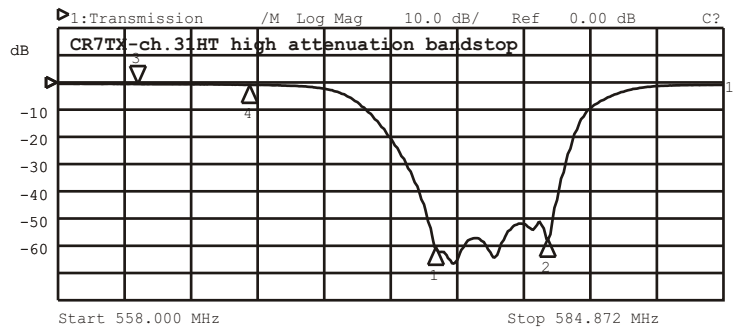
1:Mkr (MHz)	dB	2:Mkr (MHz)	dB
1: 699.2500	-43.429		
2: 697.7500	-3.370		
3: 693.2500	-0.963		
4: 700.2500	-47.514		
5> 701.0000	-26.435		

Graph 3: CR7D-ch.51-HT - Adjacent bandstop
Attenuate 692-698 MHz > 20 dB, Pass 700-706 Mhz



1:Mkr (MHz)	dB	2:Mkr (MHz)	dB
1: 692.0000	-24.137		
2: 698.0000	-21.383		
3: 700.0000	-1.685		
4> 706.0000	-0.880	4> 706.0000	-0.883

Graph 4 CR7Tx--ch.31HT Deep Bandstop -semi-adjacent
traps CH.31 >50 dB, pass ch.29 (very low loss, <1dB)



1:Mkr (MHz)	dB	2:Mkr (MHz)	dB
1: 573.2500	-60.480		
2: 577.7500	-57.467		
3> 561.2500	-0.603		
4: 565.7500	-0.866		

