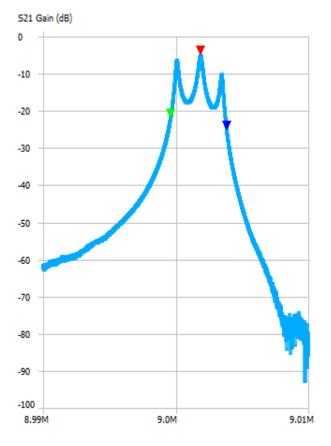
WA3TFS Adjustable crystal filter scans at various voltages on the control connections. Filter built with 3 randomly selected 9 MHz crystals and two varactor diodes. For USB, select a usable bandwidth and set BFO above the high side frequency. Tune LO is + BFO so BFO selection is opposite normal.



S21 Gain (dB) 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 -110 -120 9.0M 9.01M 8.99M

Scan 1 11.8 VDC

CENTER FREQUENCY: 9000791 khz

LOW SIDE: 8998734

HIGH SIDE: 9002587

Bandwidth approximately 3.85 khz

Scan 2 6.0 VDC

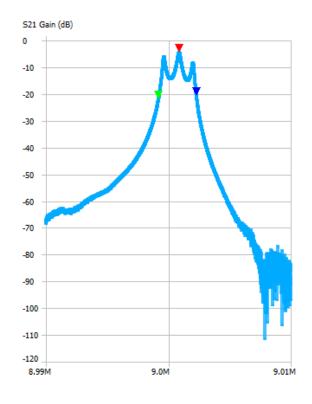
CENTER FREQUENCY: 9000211 khz

LOW SIDE: 8998541

HIGH SIDE: 9001752

Bandwidth approximately 3.211 khz

WA3TFS Adjustable crystal filter scans at various voltages on the control connections. Filter built with 3 randomly selected 9 MHz crystals and two varactor diodes. For USB, select a usable bandwidth and set BFO above the high side frequency. Tune LO is + BFO so BFO selection is opposite normal.



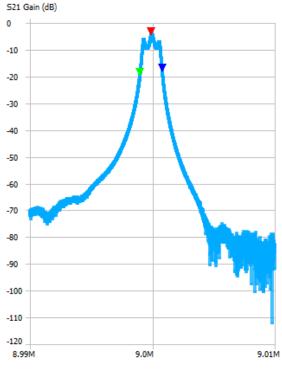
Scan 3 3.0 VDC

CENTER FREQUENCY: 8999890 khz

LOW SIDE: 8998348

HIGH SIDE: 9001174

Bandwidth approximately 2.82 khz



Scan 4 0.0 VDC (ground)

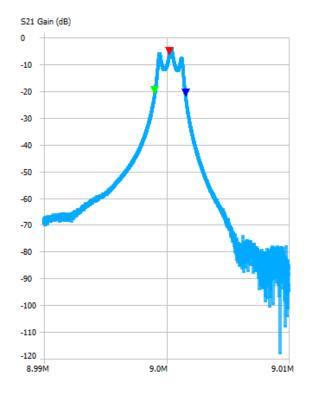
CENTER FREQUENCY: 8998991 khz

LOW SIDE: 8998156

HIGH SIDE: 8998260

Bandwidth approximately 104 Hz

WA3TFS Adjustable crystal filter scans at various voltages on the control connections. Filter built with 3 randomly selected 9 MHz crystals and two varactor diodes. For USB, select a usable bandwidth and set BFO above the high side frequency. Tune LO is + BFO so BFO selection is opposite normal.



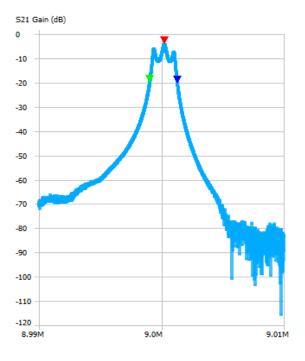
Scan 5 1.0 VDC

CENTER FREQUENCY: 8999312 khz

LOW SIDE: 8998220

HIGH SIDE: 9000532

Bandwidth approximately 2.3 kHz



Scan 6 0.6 VDC

CENTER FREQUENCY: 8999312 khz

LOW SIDE: 8998220

HIGH SIDE: 9000275

Bandwidth approximately 2.055 kHz