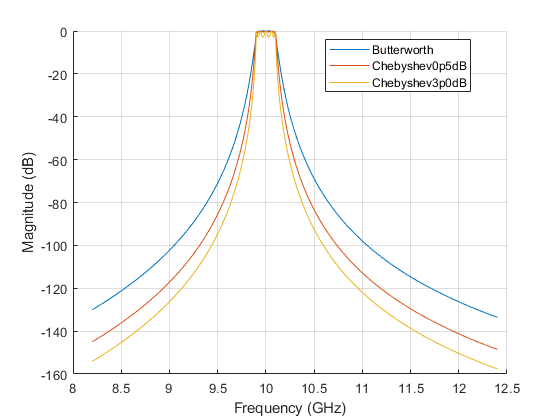
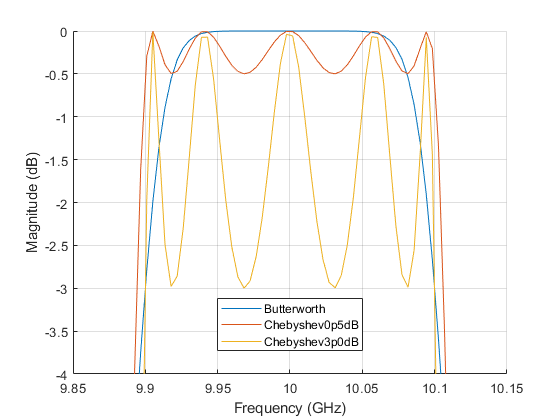
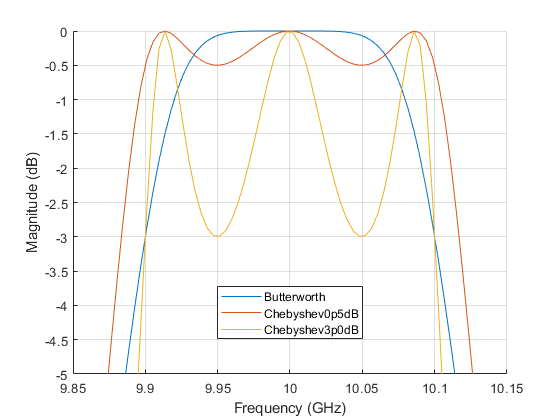
MATLAB

3rd order filters



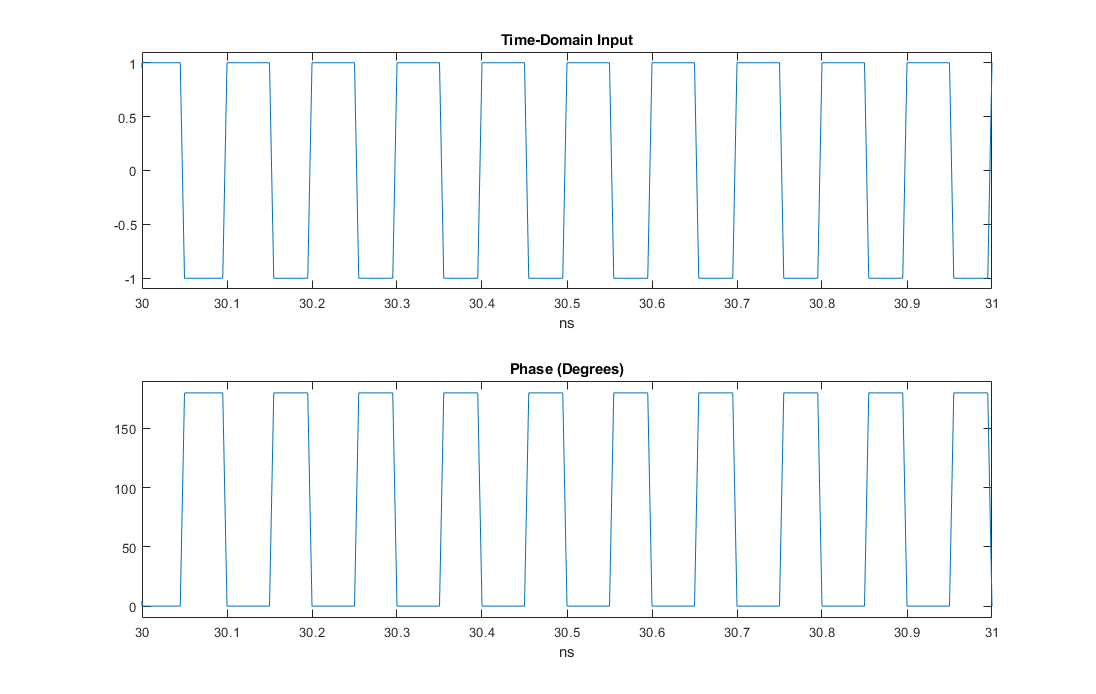


5th order filters

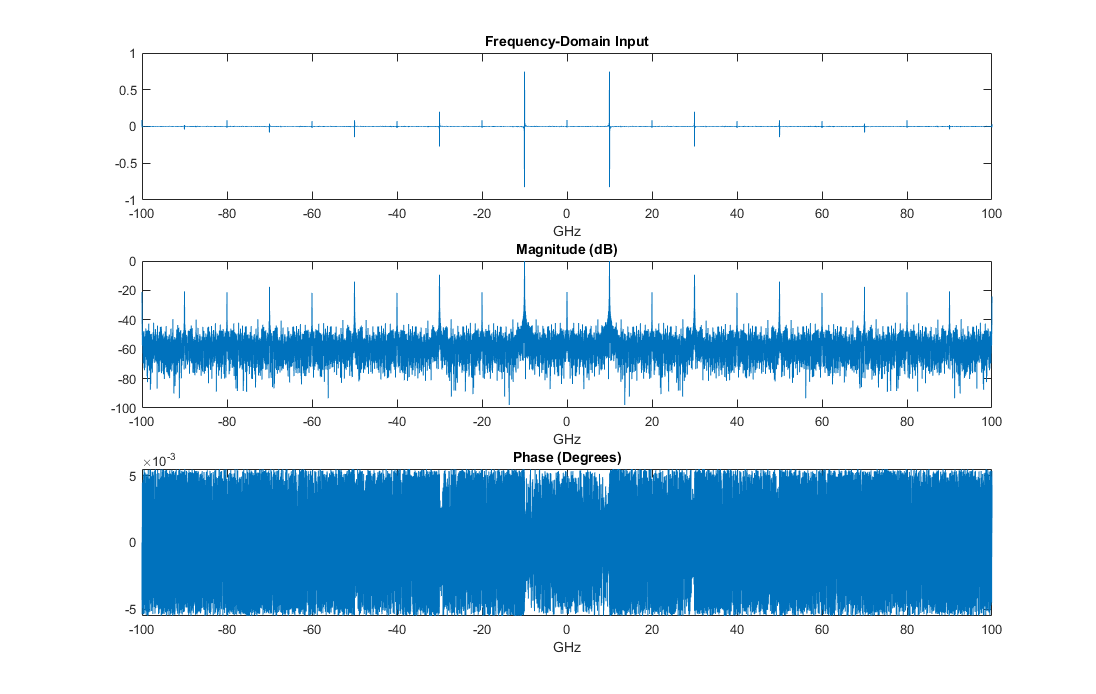


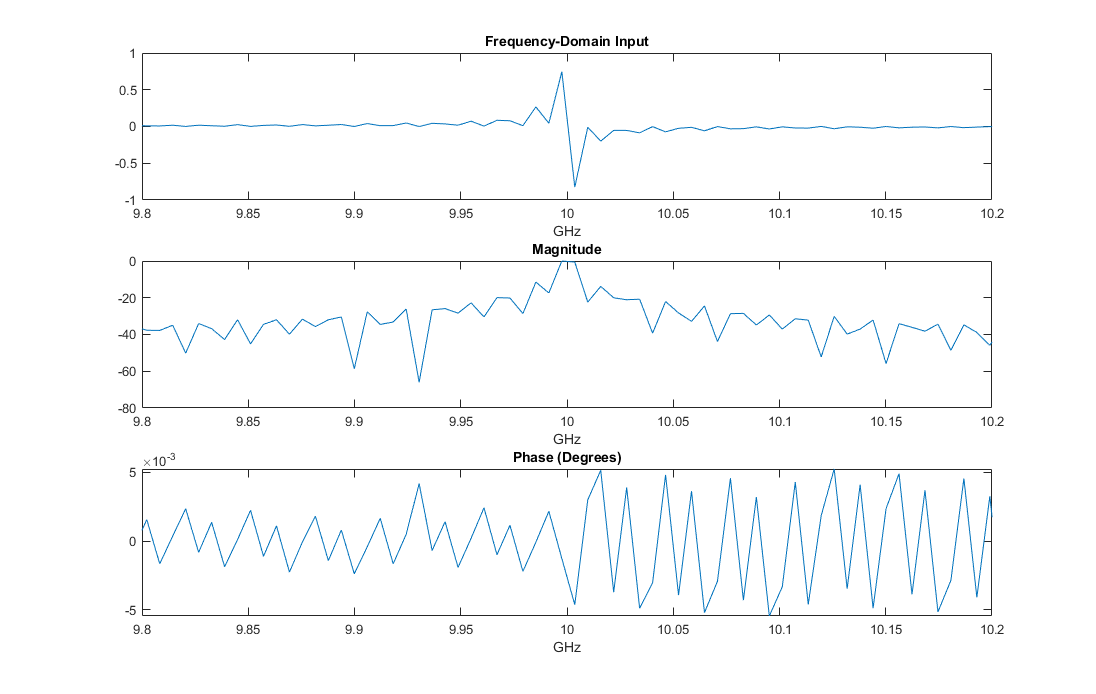
Input Square Wave

Time Domain

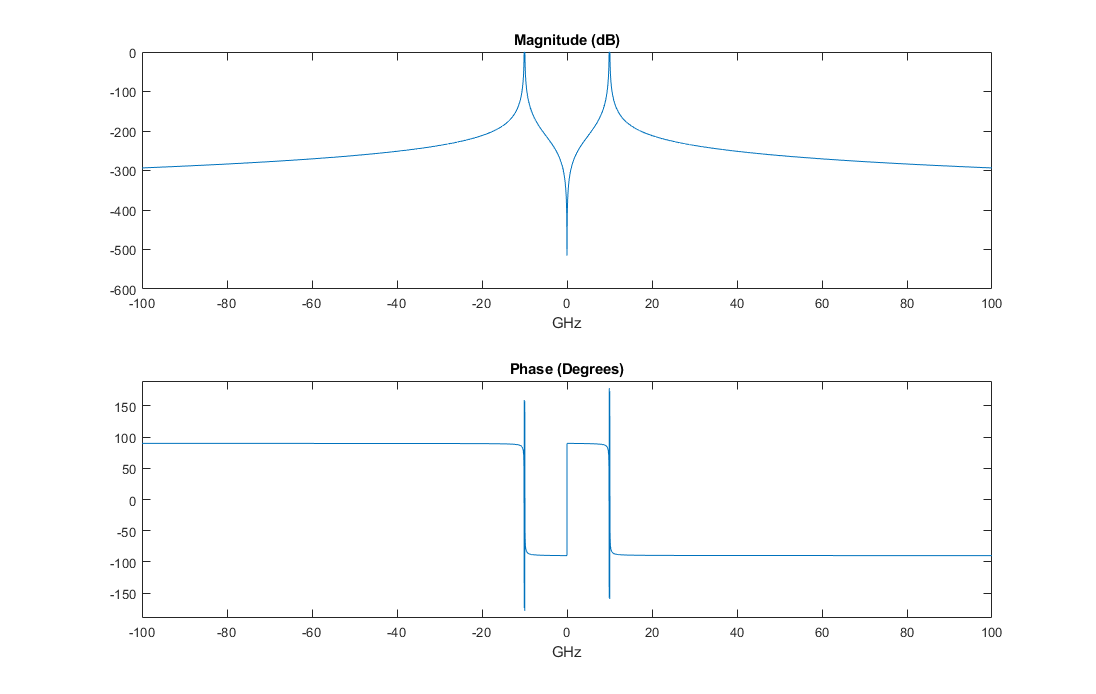


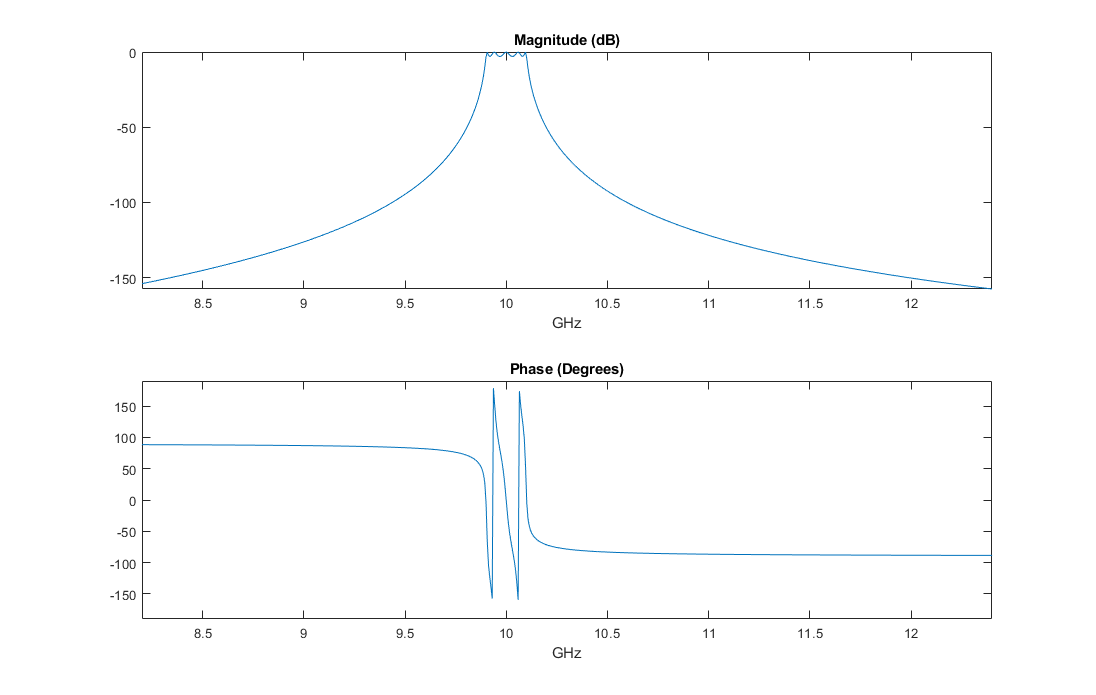
Frequency Domain

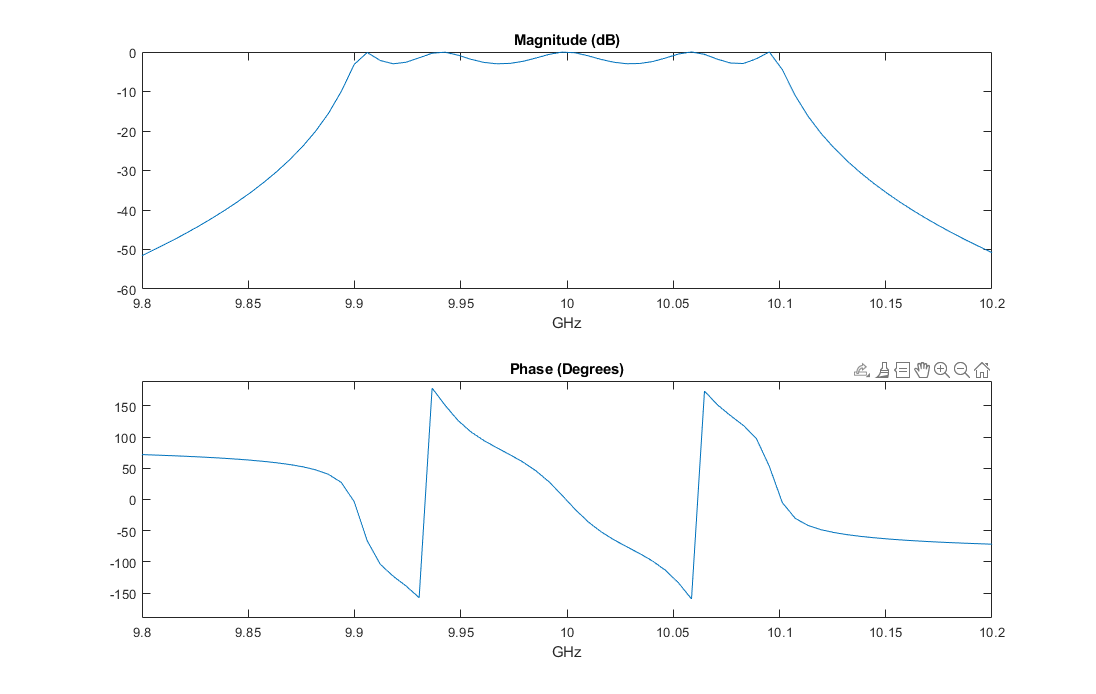


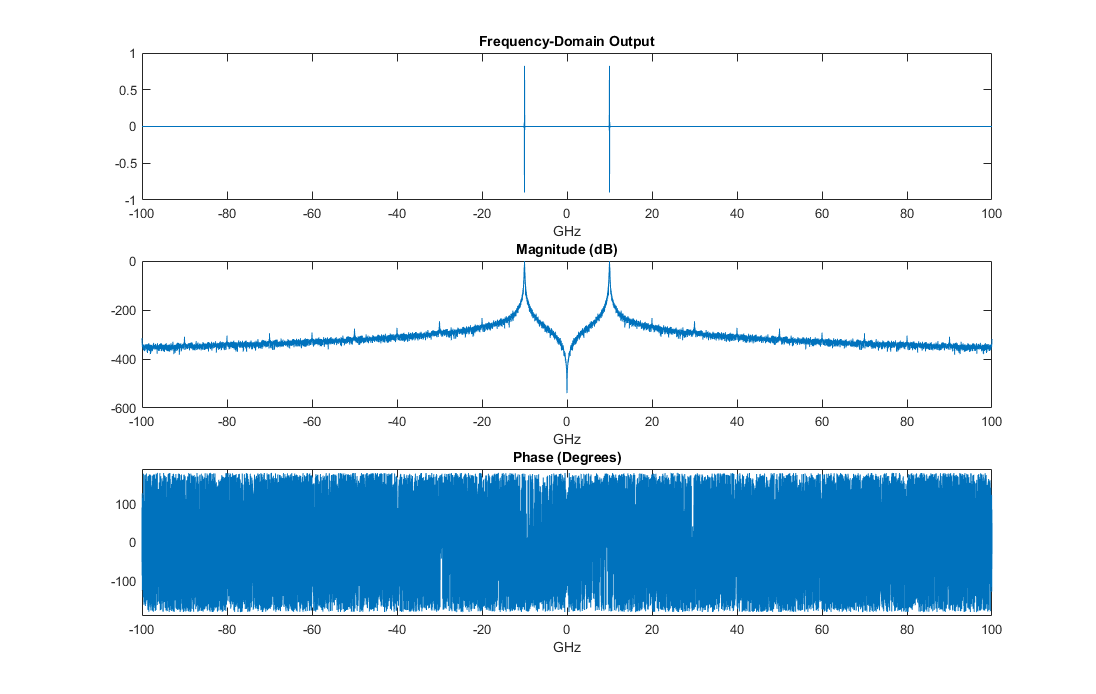


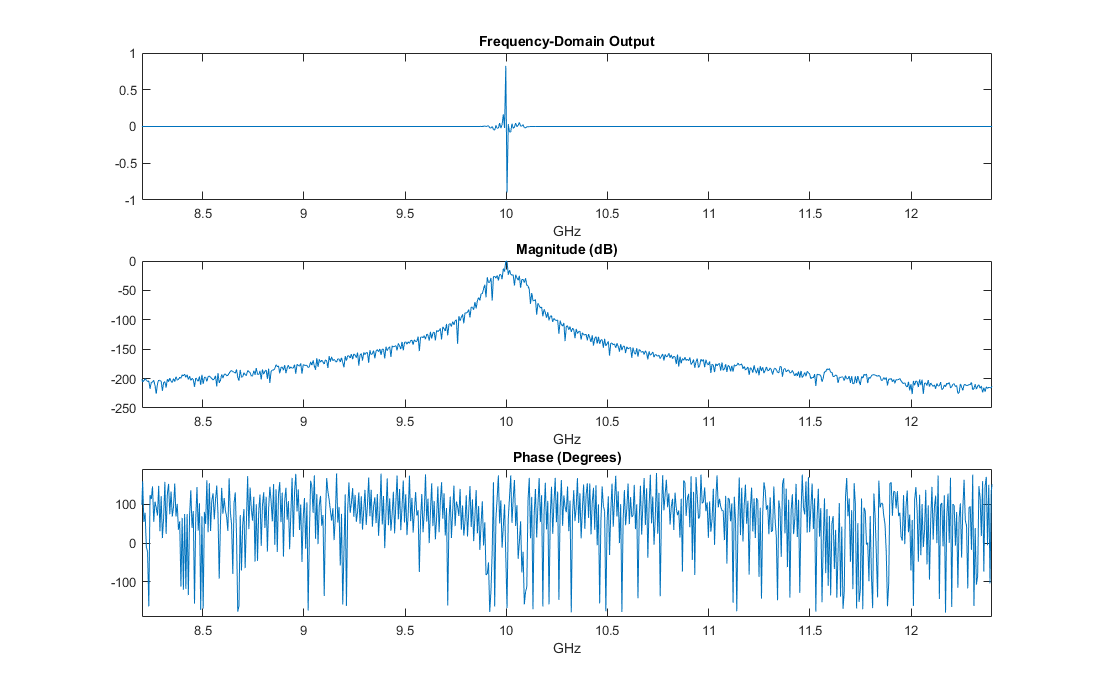
5th Order 0.5 Chebyshev Filter and Outputs

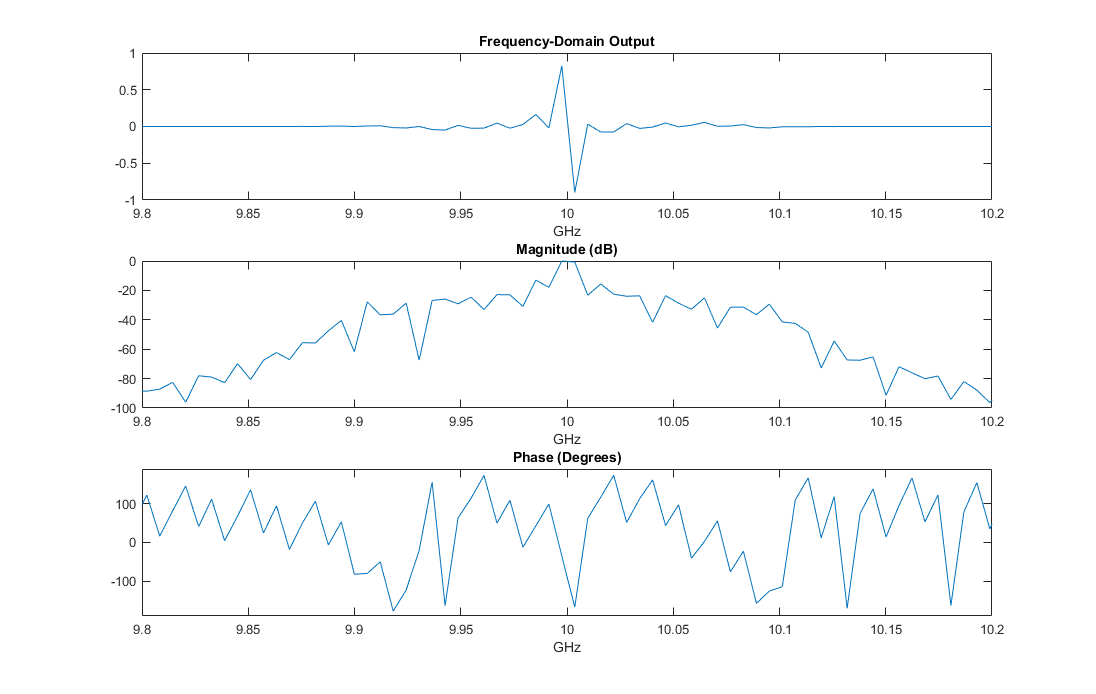


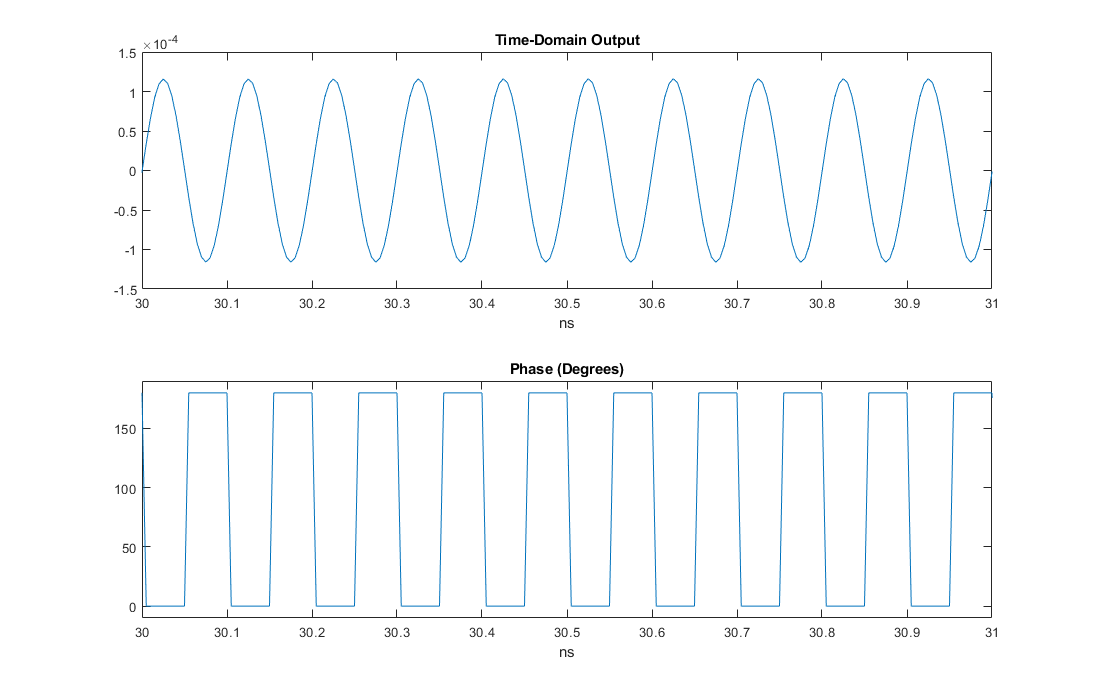




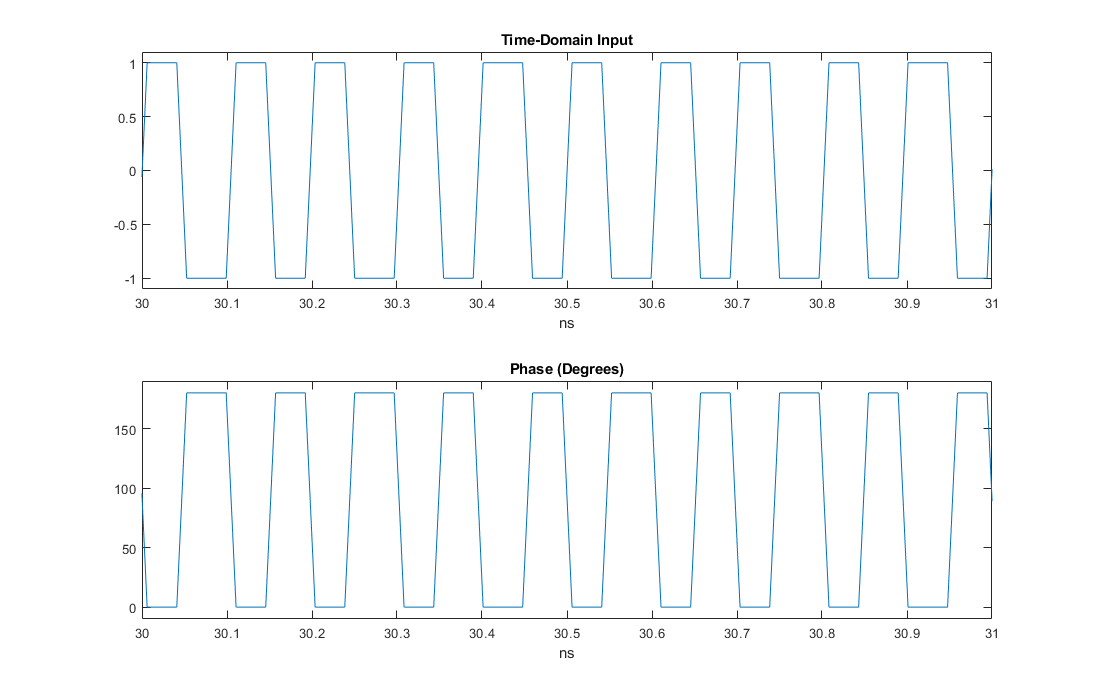


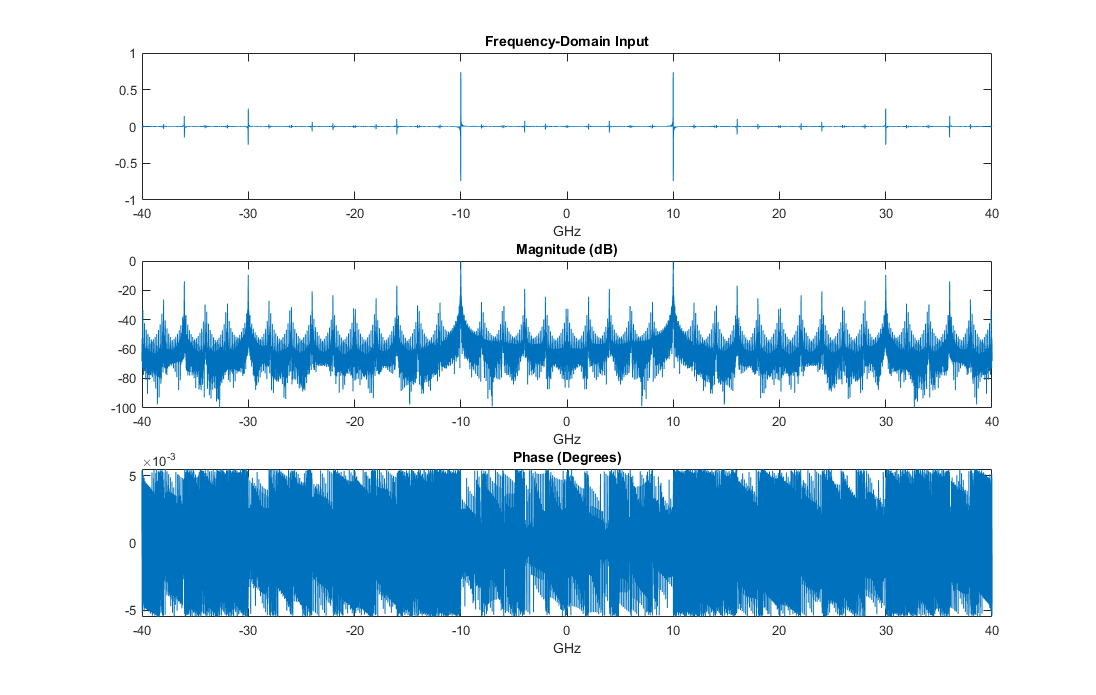


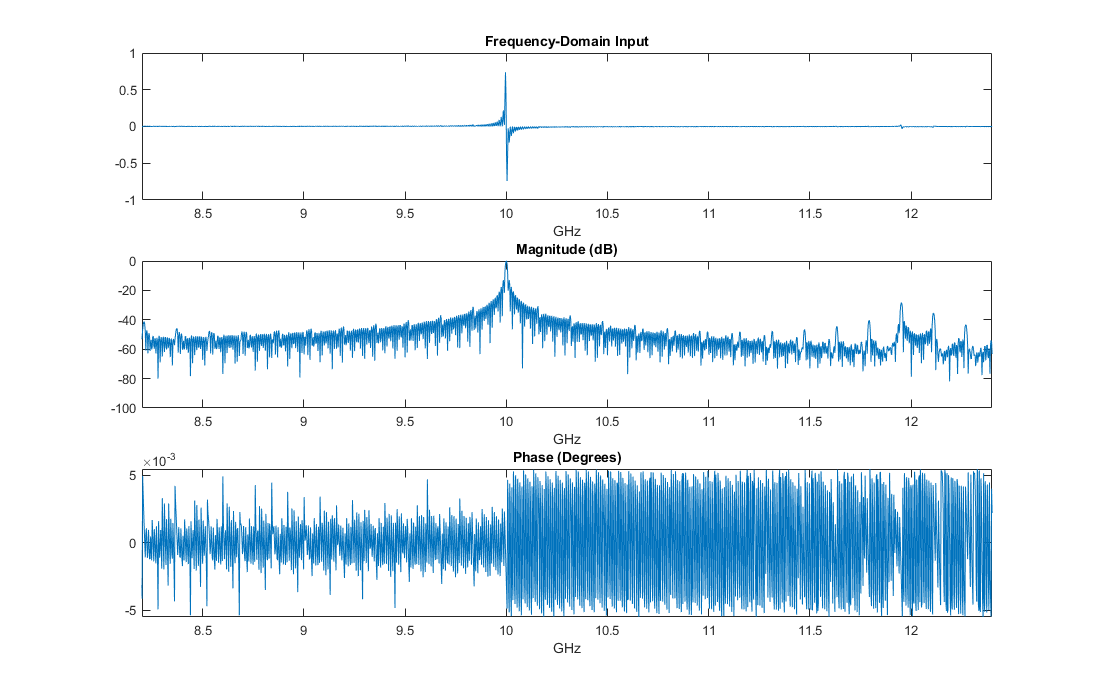


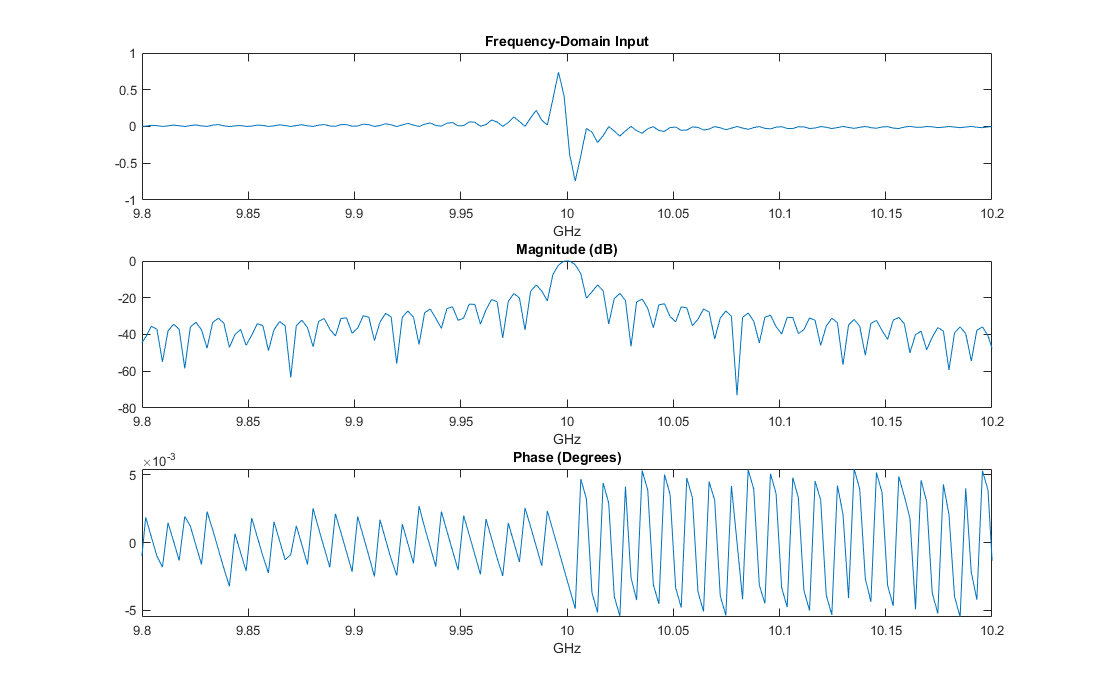


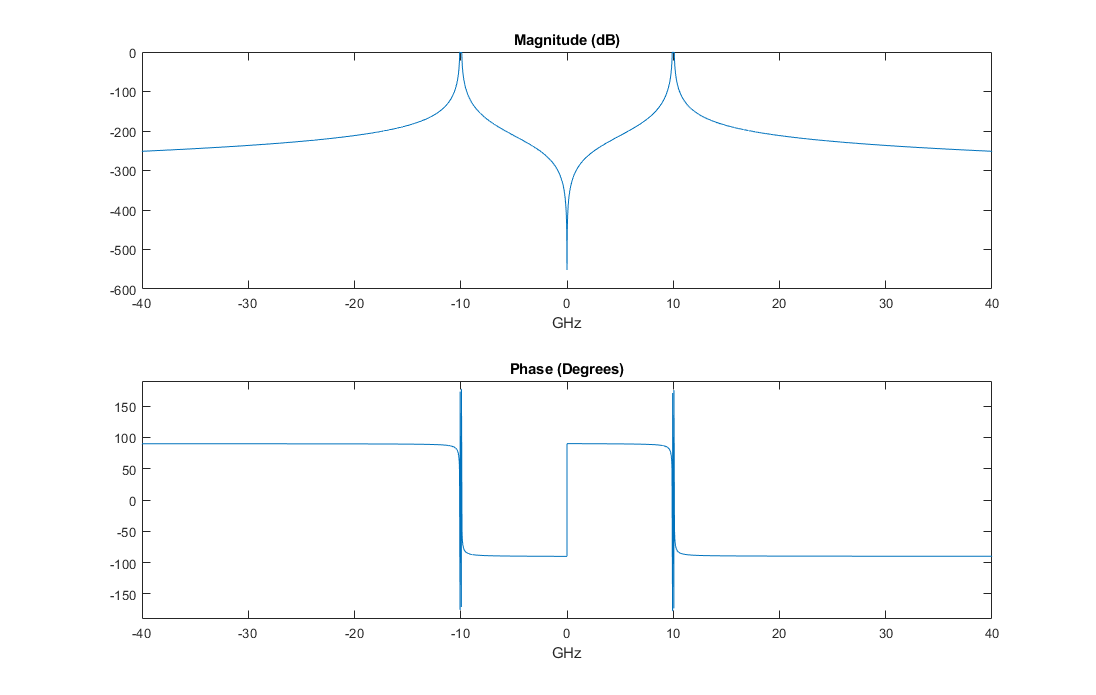
Low sample rate versions

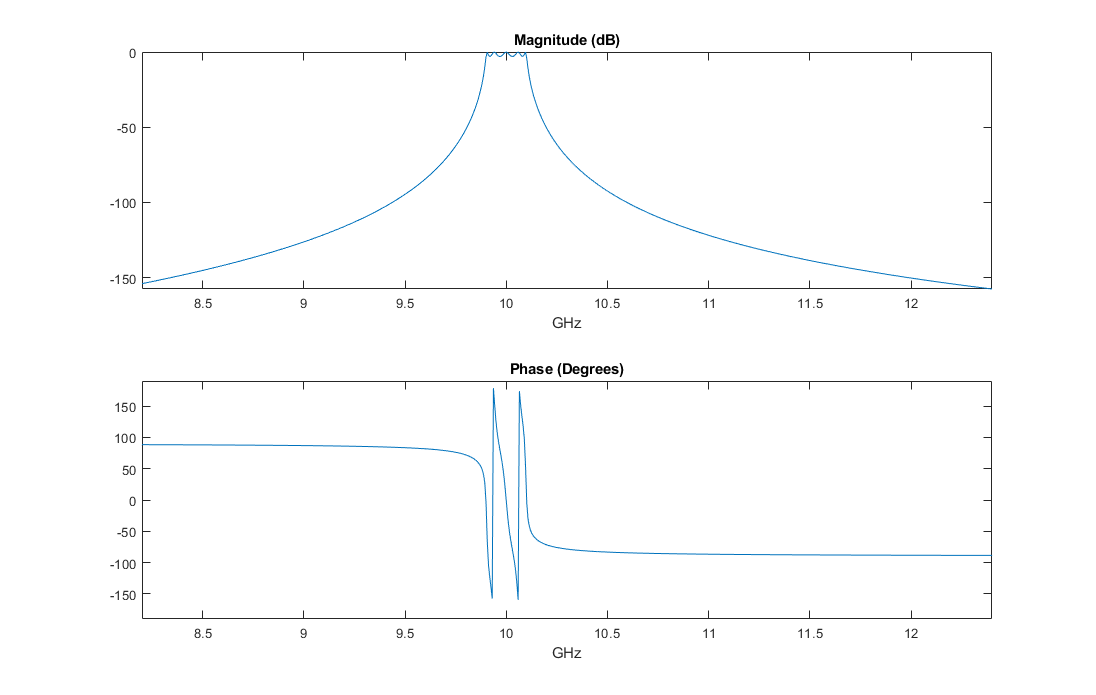


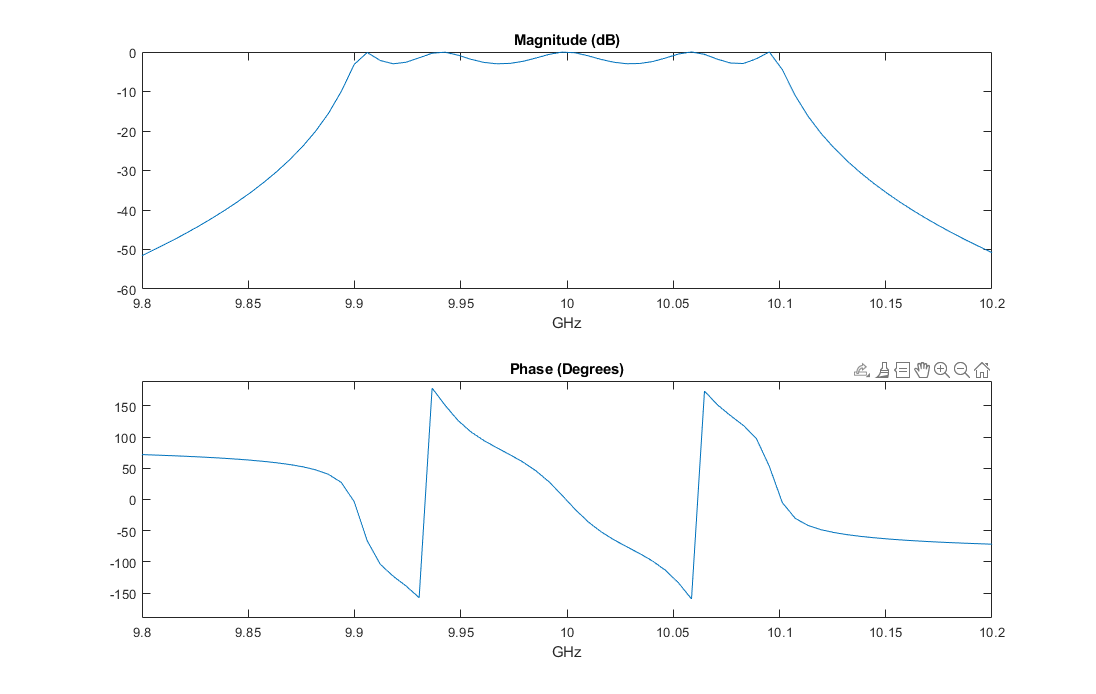


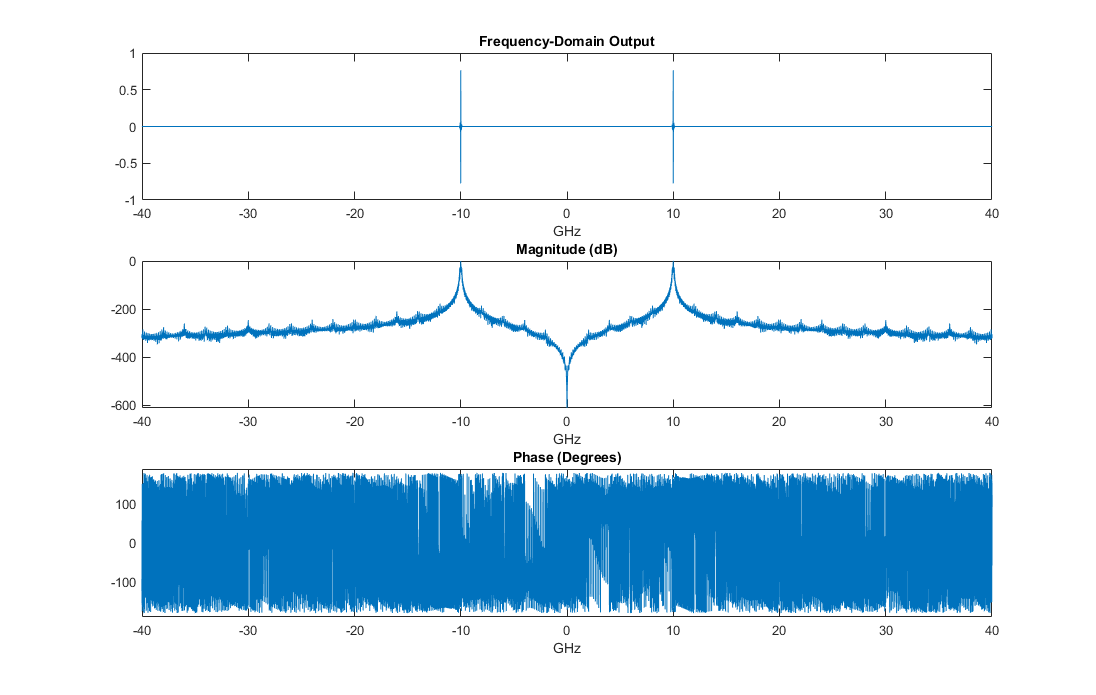


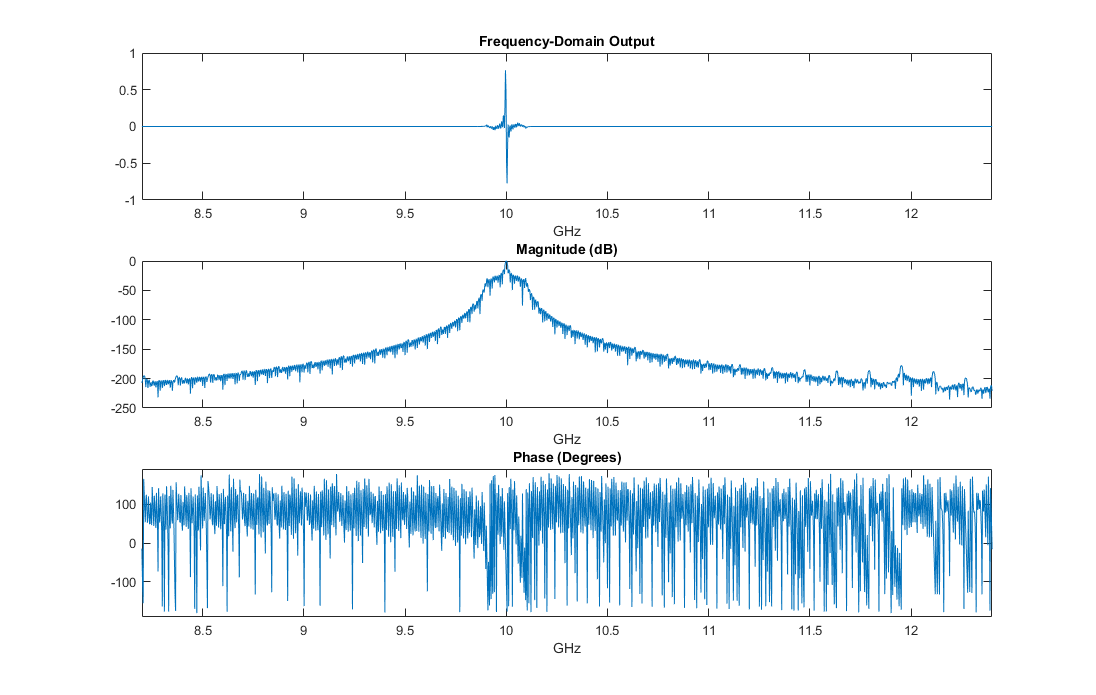


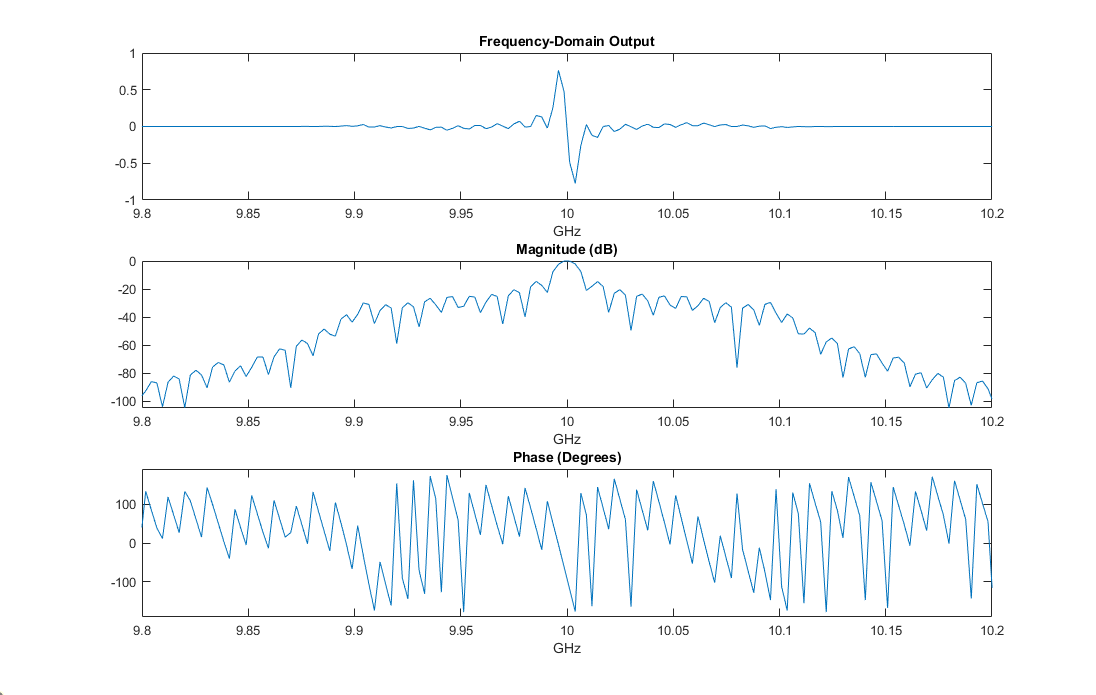


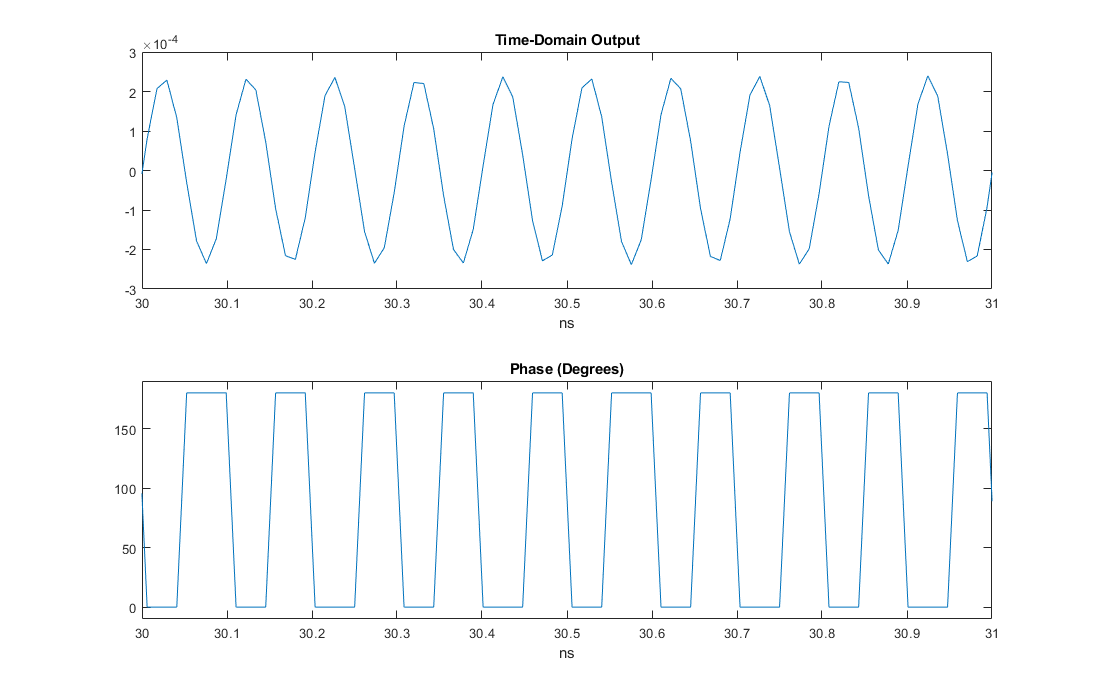






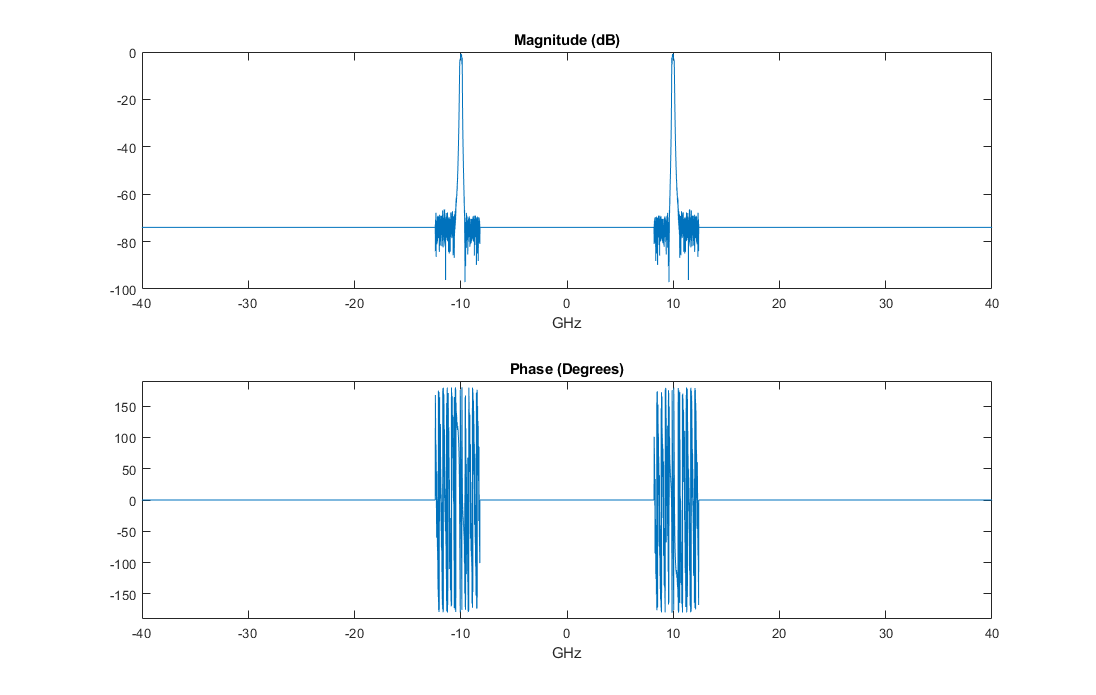


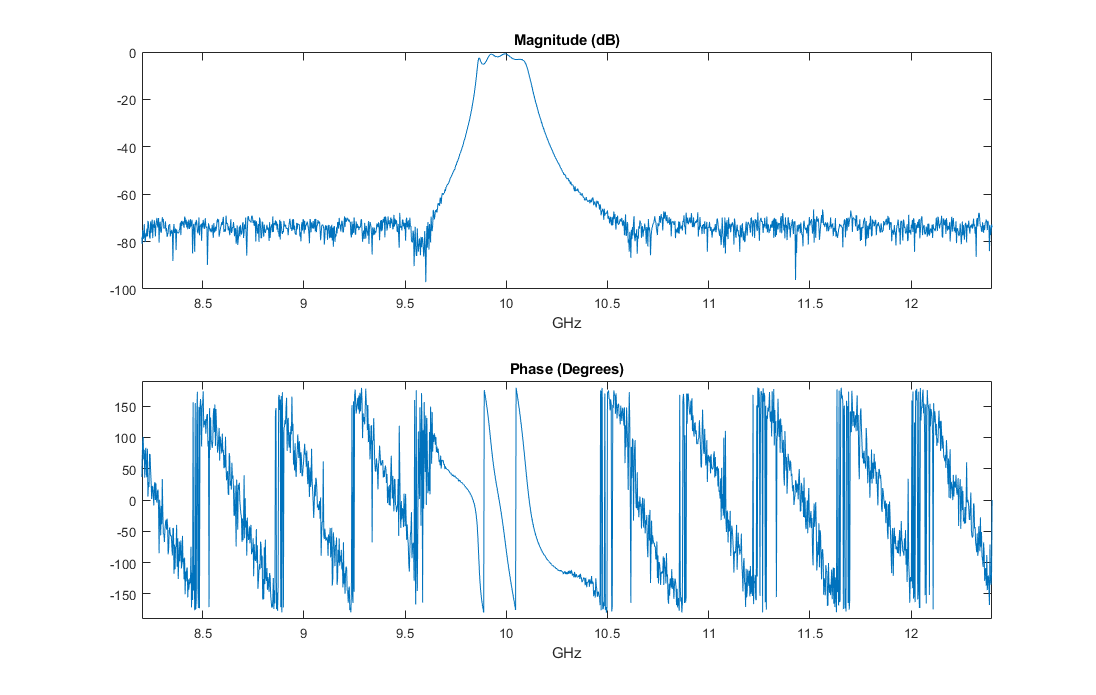


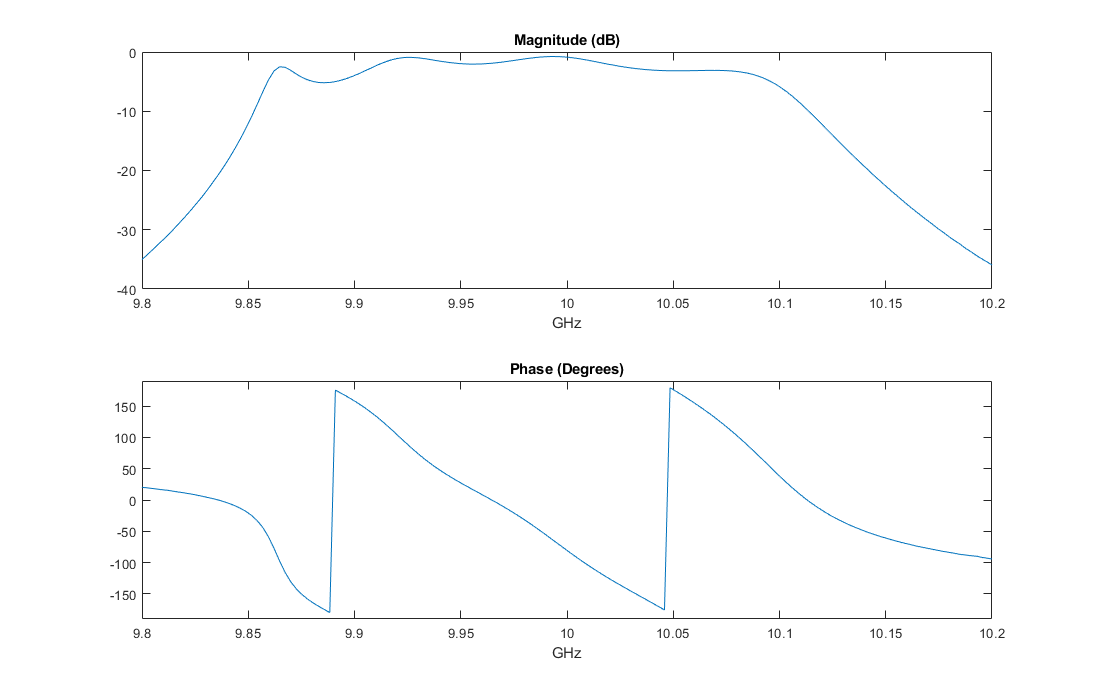


Real Filter using measured s-parameters

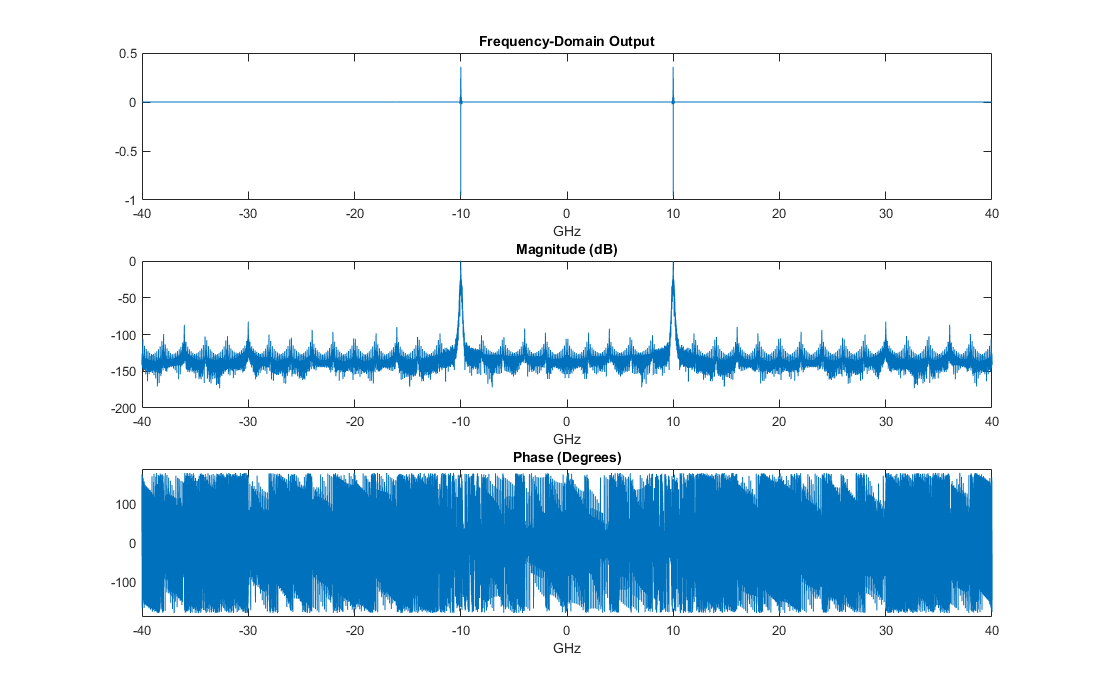
Note: s2p file only has data from 8.2GHz to 12.4 GHz, so other frequencies have an amplitude of -74 dB applied to them (2e-4 in linear)

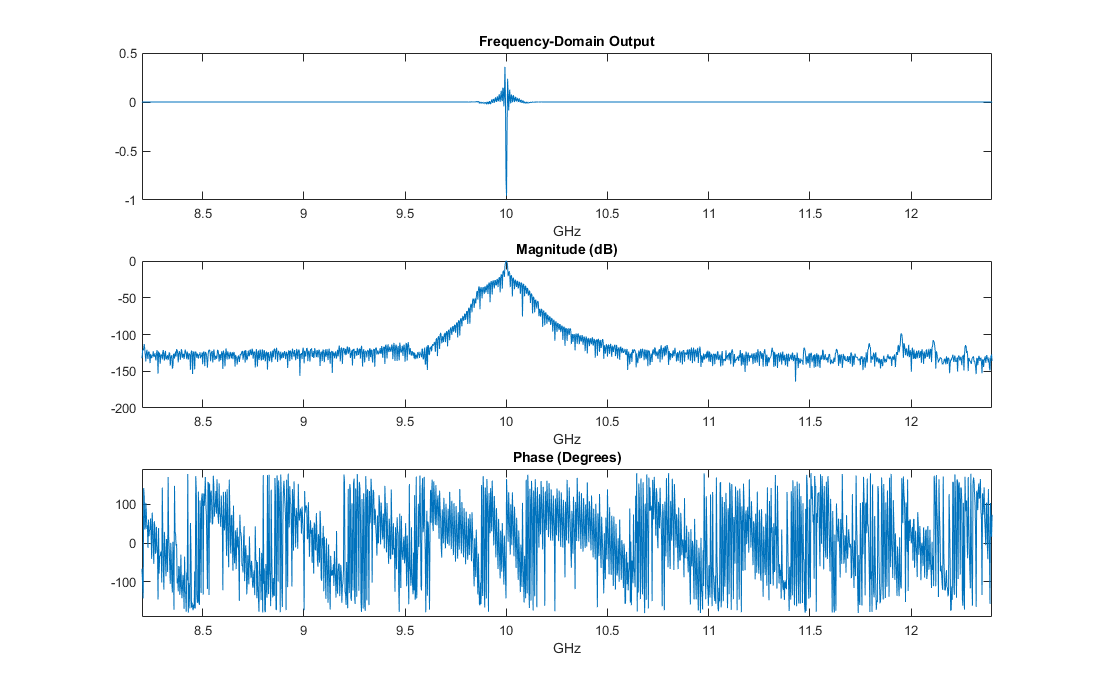


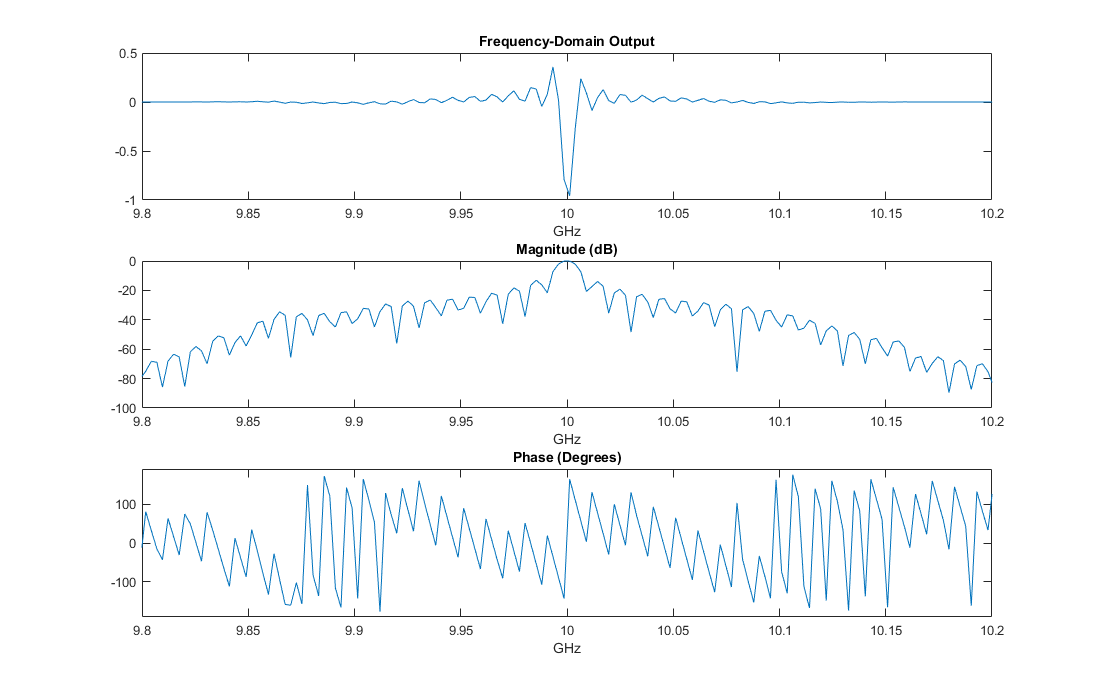




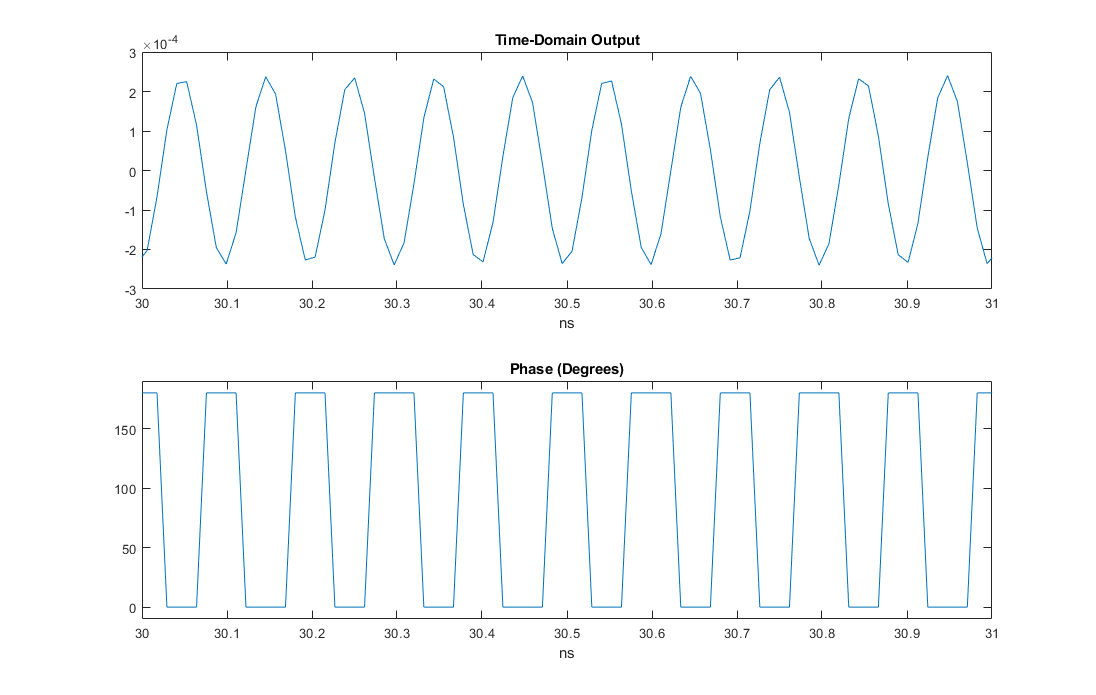
Frequency output

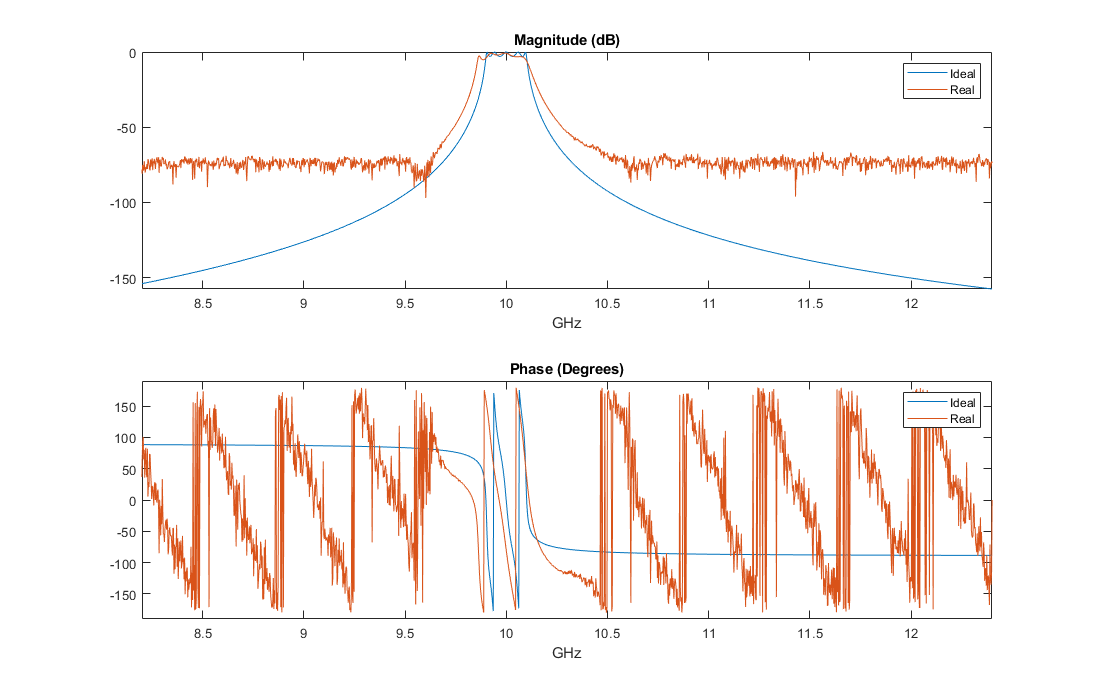


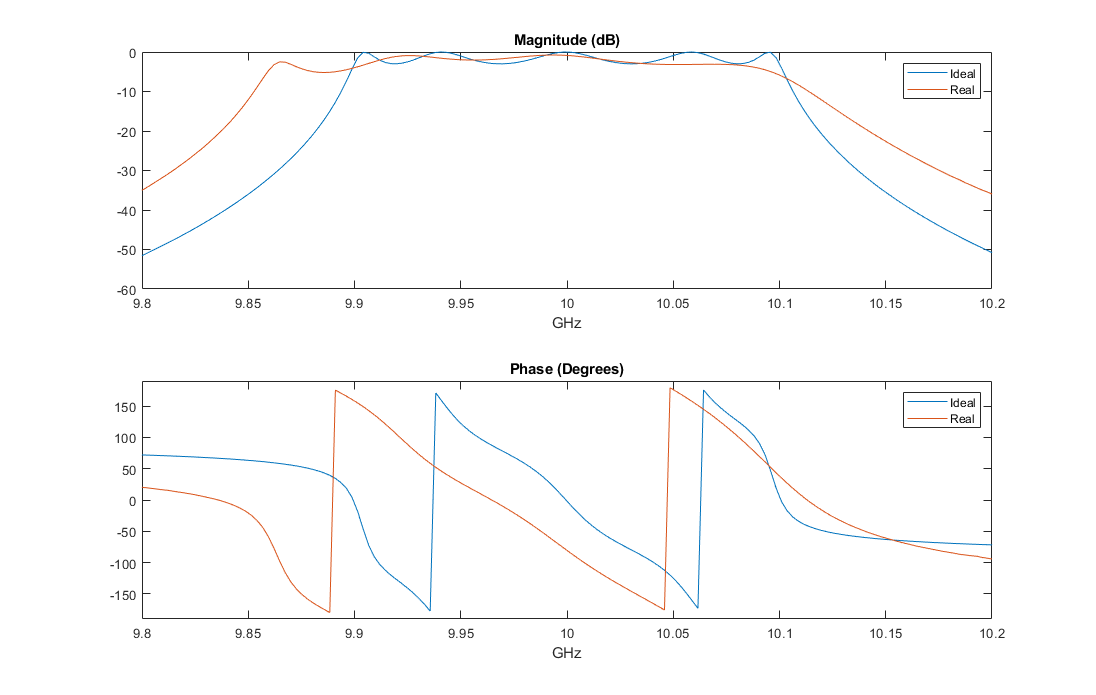


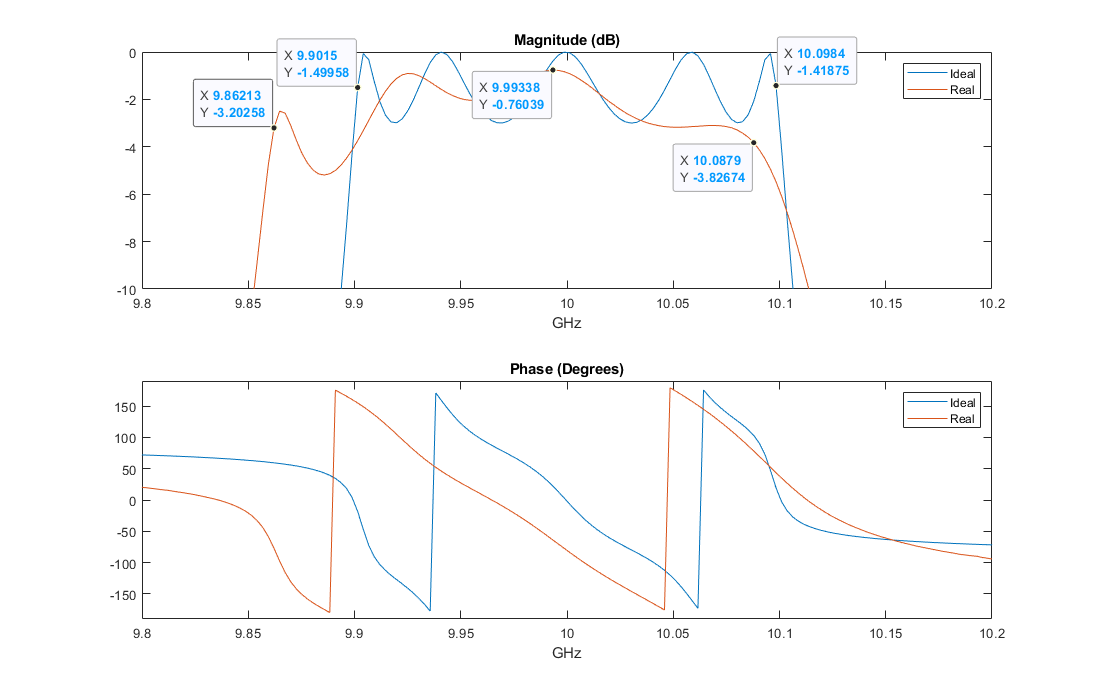


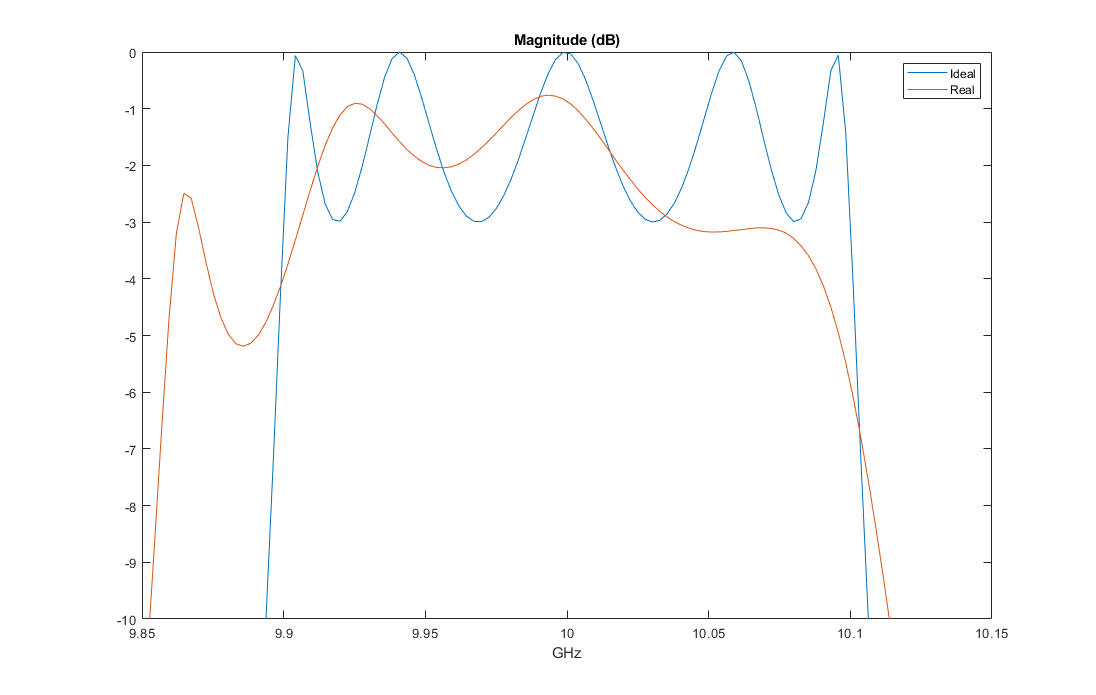
Time Output

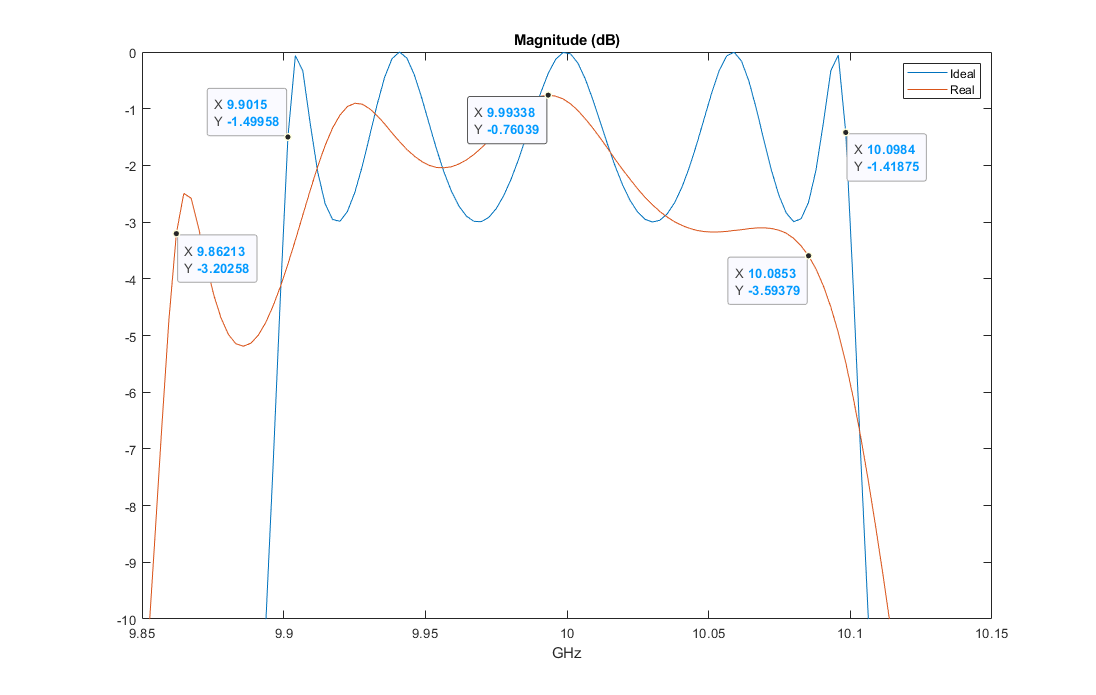




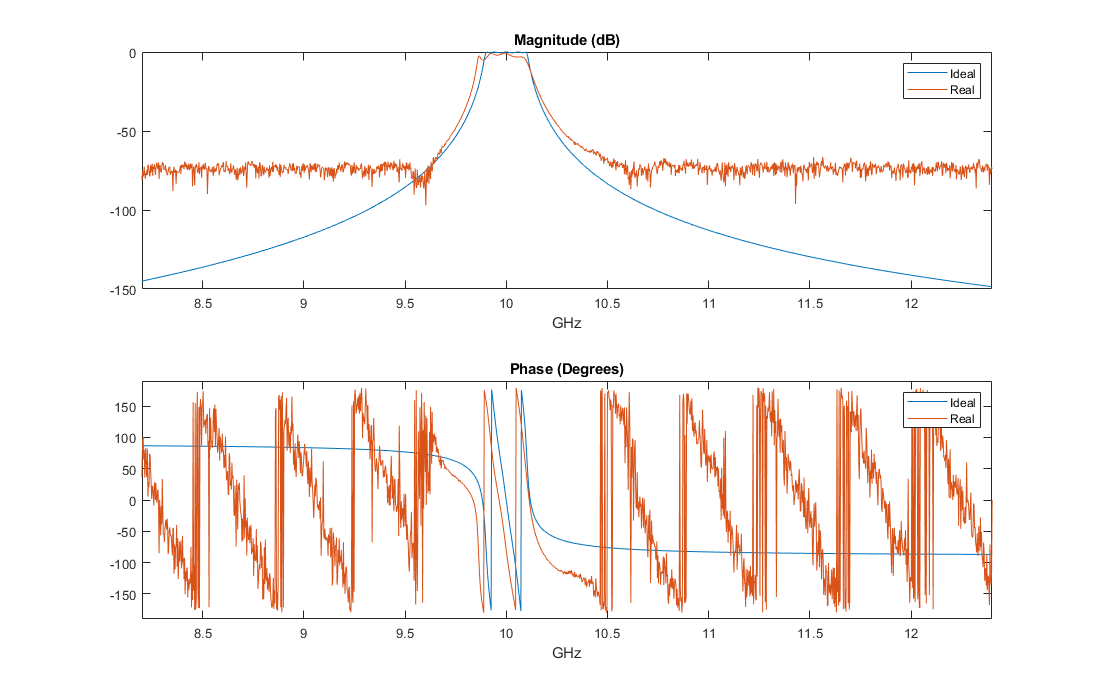


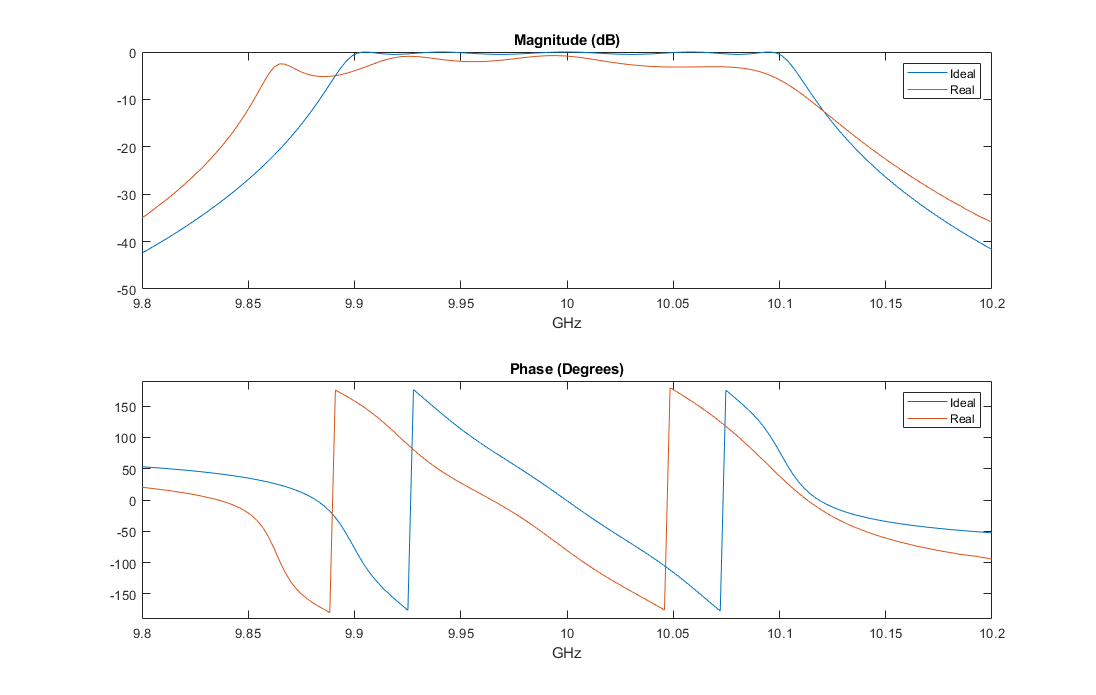


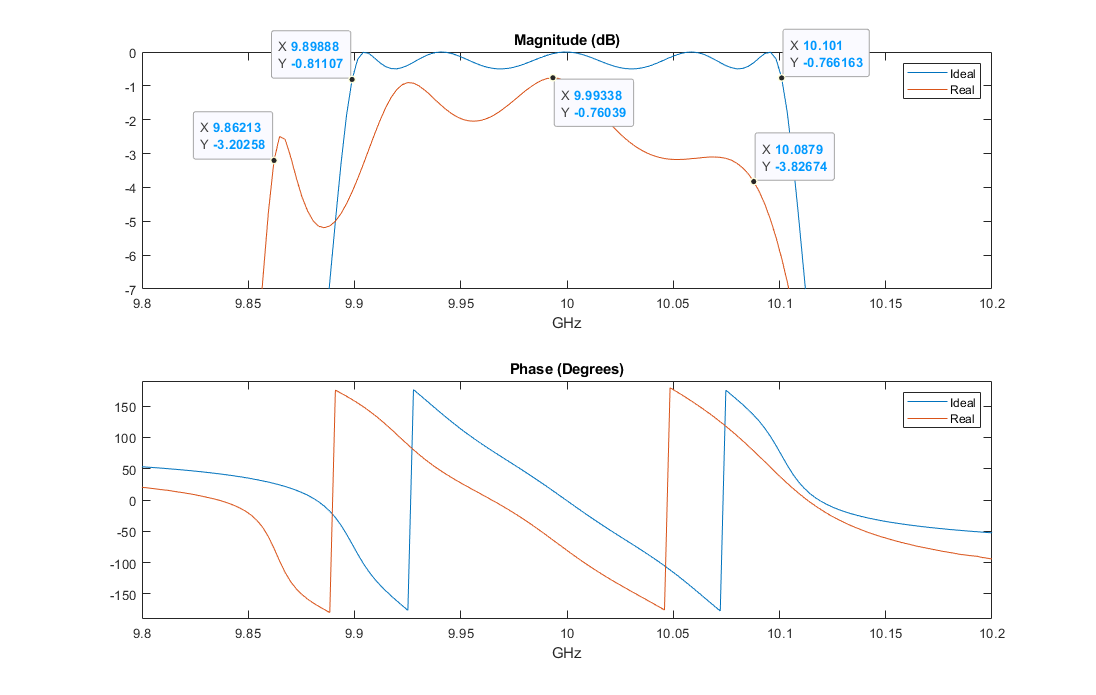


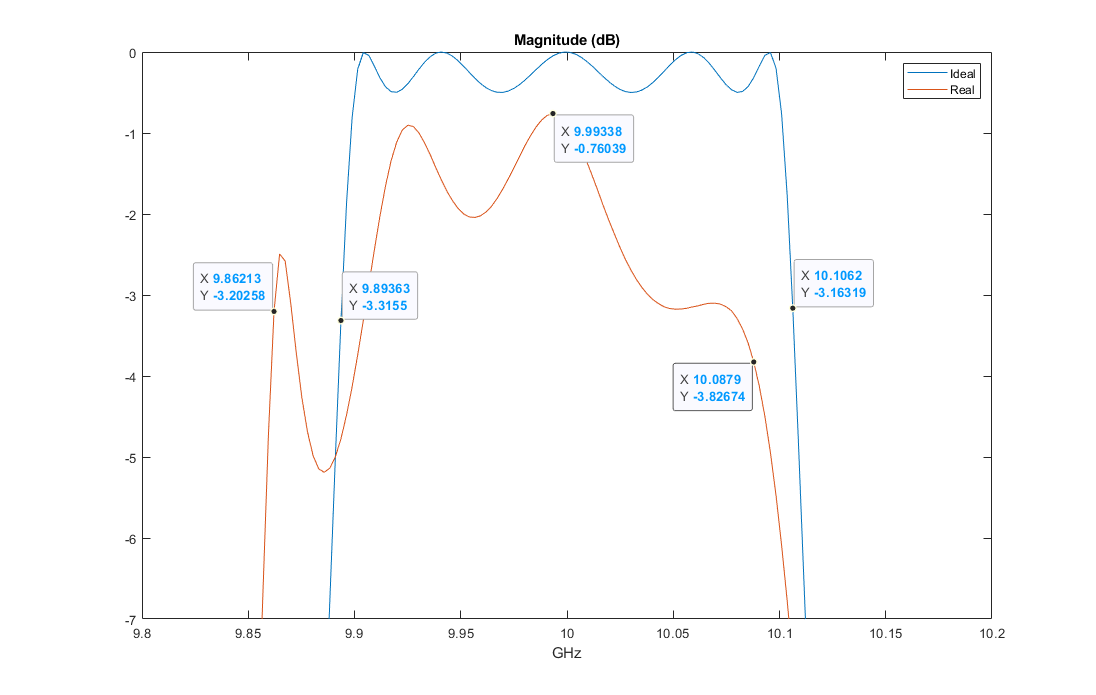


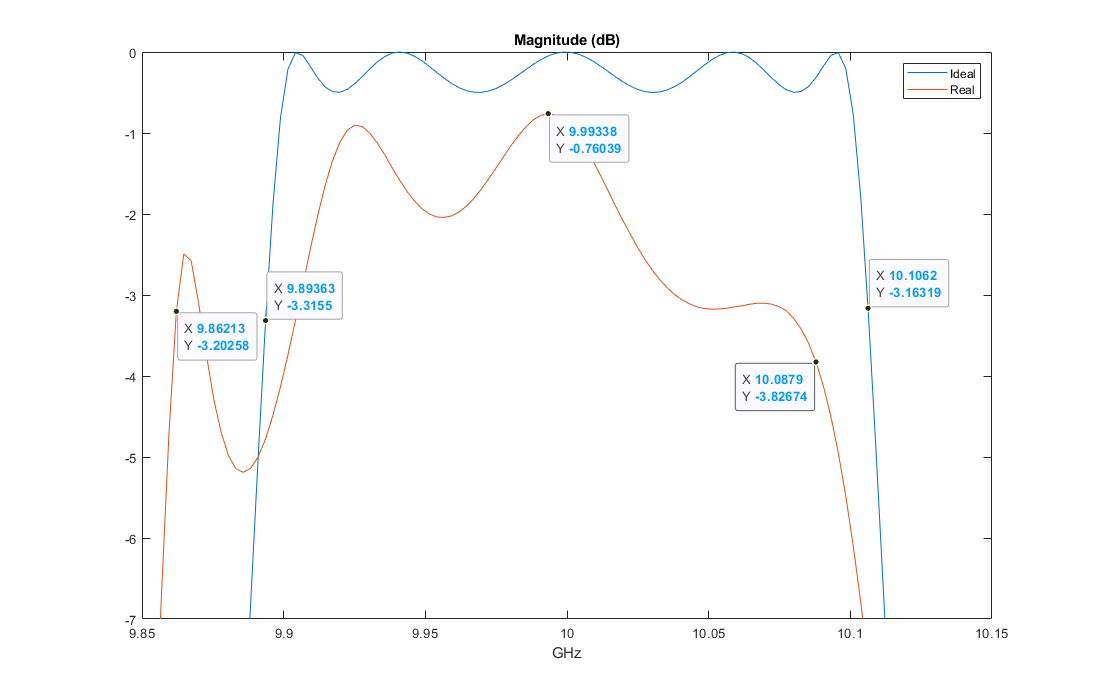
0.5 dB ripple pictures





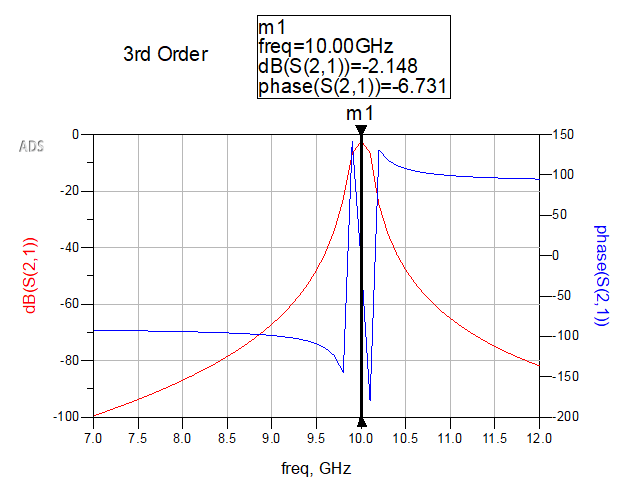


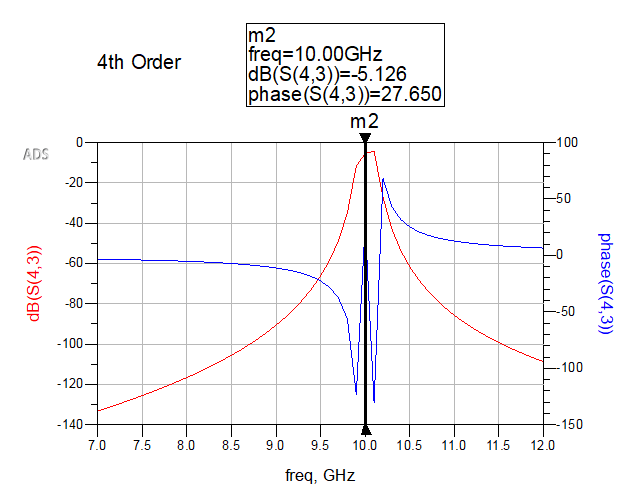


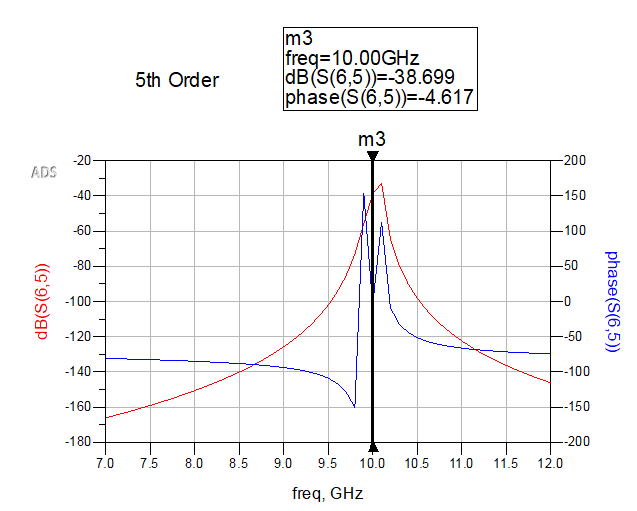


ADS

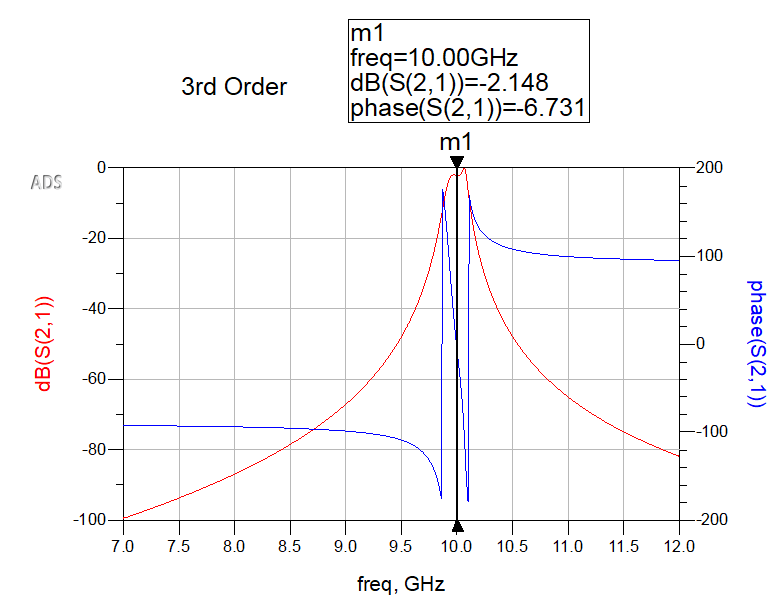
Butterworth

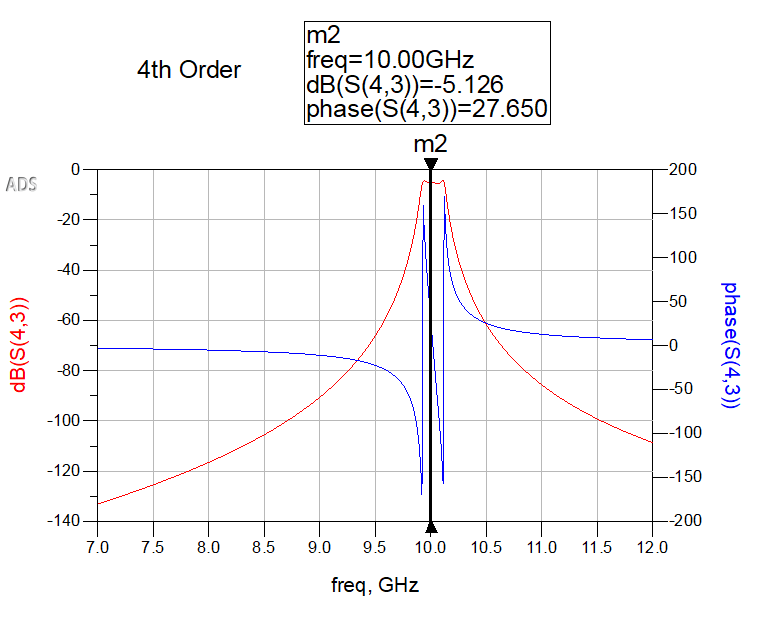


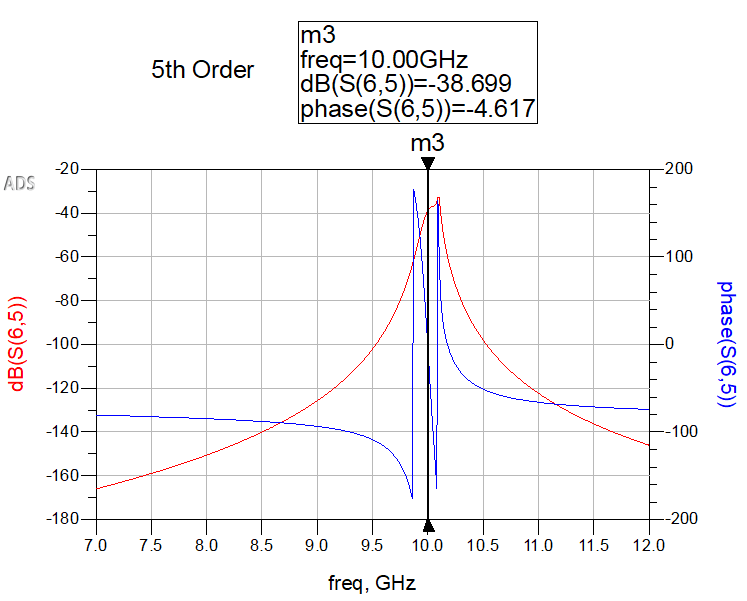




Chebychev







Maximally Flat

