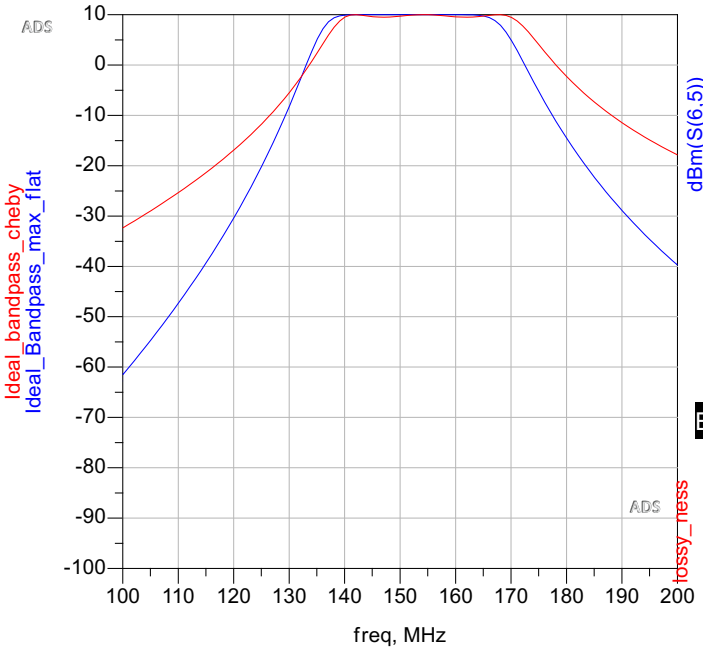
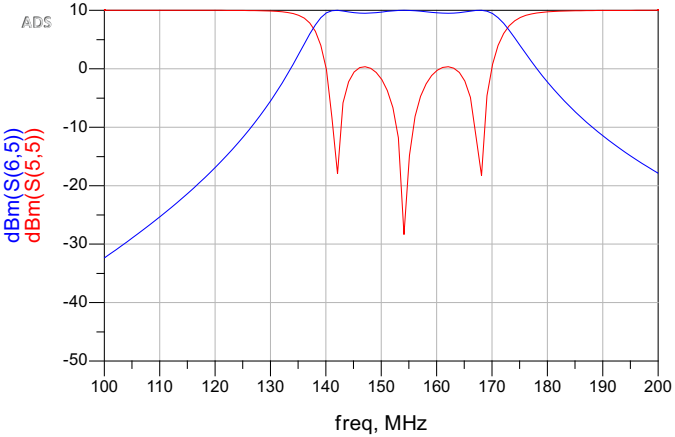
Eqn Ideal_bandpass_cheby = dbm(S(5,6))

Eqn Ideal_Bandpass_max_flat=dbm(S(2,1))

Unit is dBm

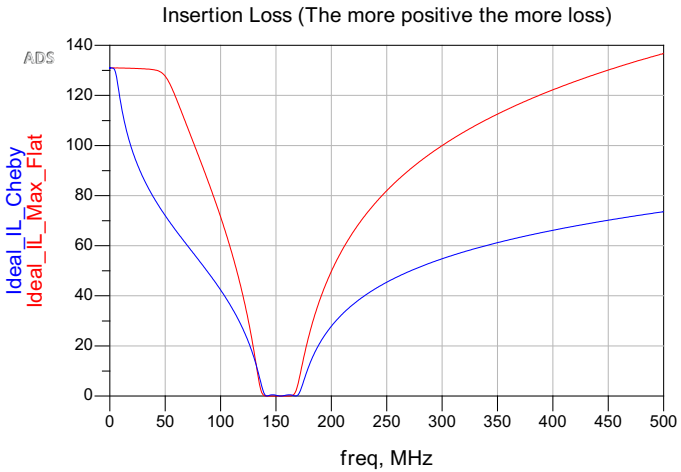




Eqn Ideal_IL_Max_Flat = -10*log10(1-pow(mag(S(1,1)),2))

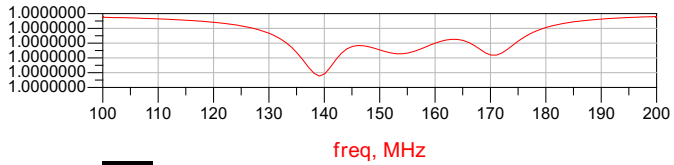
Eqn Ideal_IL_Cheby = -10*log10(1-pow(mag(S(5,5)),2))

Insertion Loss (The more positive the more loss)



Eqn lossy_ness =mag(S(5,5))*mag(S(5,5))+mag(S(6,5))*mag(S(6,5))

Measure of Lossiness of Filter



Max flat:
Has N = 8, a lot of components.
Some components cannot be purchased because it's not realistic

Cheby:
Has N = 3, all components seems purcha-able
Not sure if they are all realistic

Eqn Cheby_filter_bw3dB = bandwidth_func(db(S65),0)

Eqn ChebyShev_center_f = center_freq(dB(S65), 3)

Cheby_filter_bw3dB	ChebyShev_center_f
3.891E6	1.553E8