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11.) hamming, hanning , kaiser
clearall;
clc;
n=36;
wc=0.5*pi;%%cutoff freqz
w=0:0.001:2*pi;
%%hamming window%%
h=fir1(n,wc/pi,hamming(n+1));
i=freqz(h,1,w);
subplot(3,2,1);
plot(w/pi,20*log10(abs(i)), 'red');
title('Mag. res "Hamming"');
subplot(3,2,2);
plot(w/pi,angle(i), 'blue');
title('Freq.res. "Hamming"');
%%Hanning window%%
h=fir1(n,wc/pi,hann(n+1));
i=freqz(h,1,w);
subplot(3,2,3);
plot(w/pi,20*log10(abs(i)), 'red');
title('Mag. res "Hanning"');
subplot(3,2,4);
plot(w/pi,angle(i));
title('Freq.res. "Hanning"');
%%kaiser window%%
n=30;
w=0:0.01:2*pi;
%h=fir1(n,wc/pi,kaiser((n+1),0.5));
h=kaiser(n+1,0.5);
i=freqz(h,1,w);
subplot(3,2,1);
plot(w/pi,20*log10(abs(i)), 'red');
title('Mag. res "Hamming"');
subplot(3,2,2);
plot(w/pi,angle(i), 'blue');
title('Freq.res. "Hamming"');

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12.) compare hanning hamming kaiser window

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n=50;
wc=0.5*pi;
w=0:0.001:pi;
h=fir1(n,wc/pi,hamming(n+1));
i=freqz(h,1,w);
plot(w/pi,20*log(abs(i)), 'red');
gridon;
holdon;
h=fir1(n,wc/pi,hanning(n+1));
i=freqz(h,1,w);
plot(w/pi,20*log(abs(i)), 'green');
holdon;
h=fir1(n,wc/pi,blackman(n+1));
i=freqz(h,1,w);
plot(w/pi,20*log(abs(i)), 'blue');

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holdoff;