

FIR Tutorial

1. Sketch the frequency response of an ideal digital highpass filter with a cutoff frequency at ω_c . Label all axis appropriately.
2. Calculate the impulse response of the ideal highpass filter analytically.
3. One uses a Blackman window for the highpass filter. Sketch the frequency response for a digital highpass filter for the Blackman window compared to using a rectangular window.
4. Could there be an advantage of using no window function for a highpass filter, for example for DC removal?