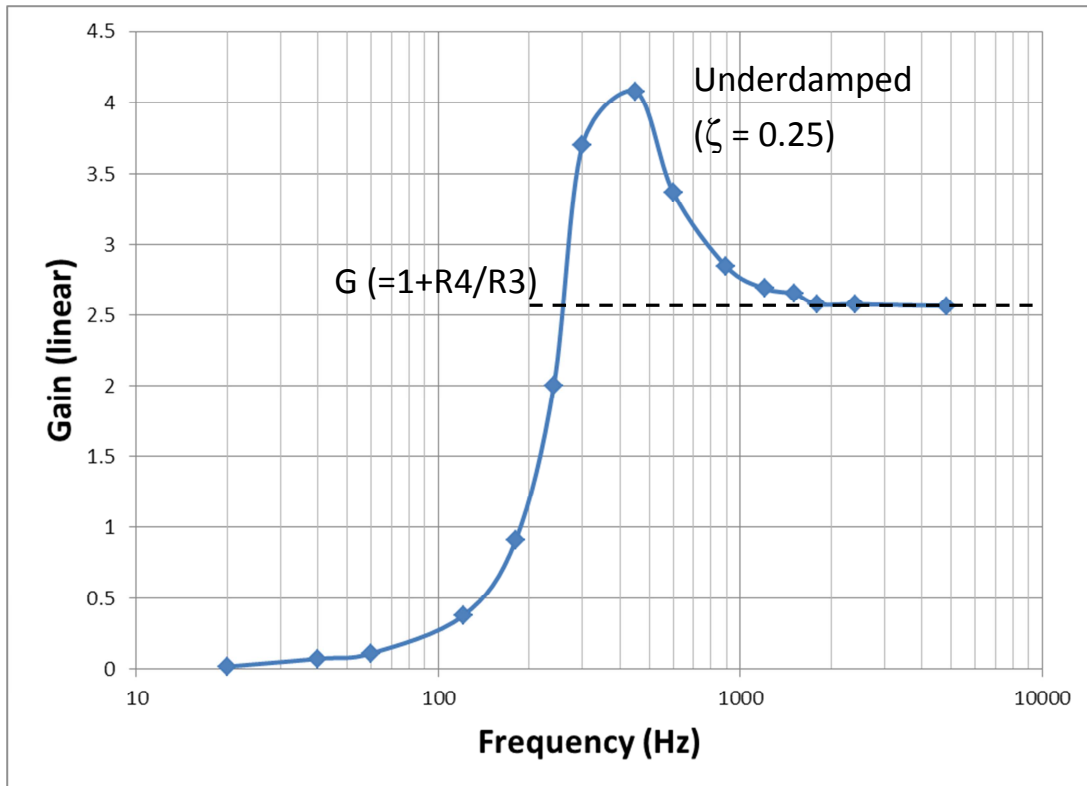
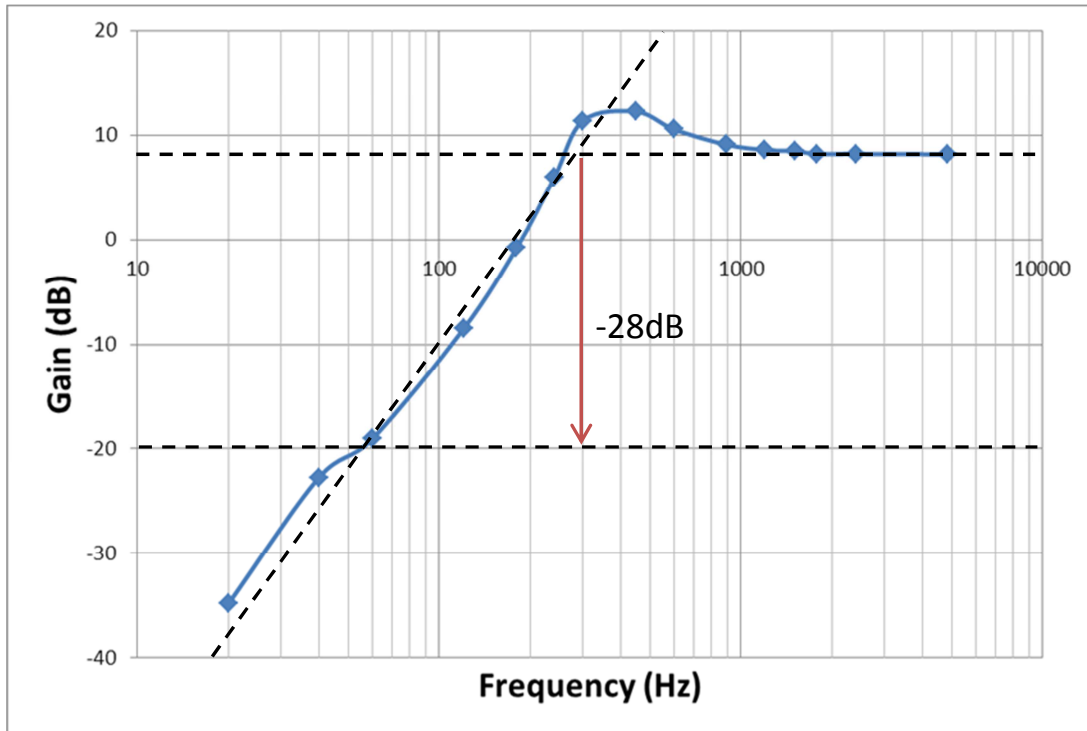


Sallen-Key HPF response with $R_2 = R_1 = 2.2\text{k}\Omega$ and $C_2 = C_1 = 220\text{nF}$ giving a nominal $f_c = 329\text{Hz}$. The damping factor $\zeta = 0.25$ corresponds to $G = 2.5$ which is nominally achieved at $R_4/R_3 = 3.3\text{k}\Omega/2.2\text{k}\Omega$.



On a log-log plot:



The second-order filter has a slope of 40dB/decade or 12dB/octave . Based on the design f_c of 300Hz , the relative gain at 60Hz should be $(-40 + 12) = -28\text{dB}$ i.e. down one decade to 30Hz (-40dB) and then up one octave to 60Hz ($+12\text{dB}$). The 60Hz rejection should be $+28\text{dB}$. The filter as built actually achieved 27.3dB rejection at 60Hz .