

Filter Wizard

Created by mike stebbins on 12/12/2015

Filter Wizard Design Report

Filter Requirements for Band-Pass, 4th order Chebyshev 0.18 dB

Specifications: Optimize for Voltage Range, $+V_s = 5$, $-V_s = 0$

Gain: 1 V/V

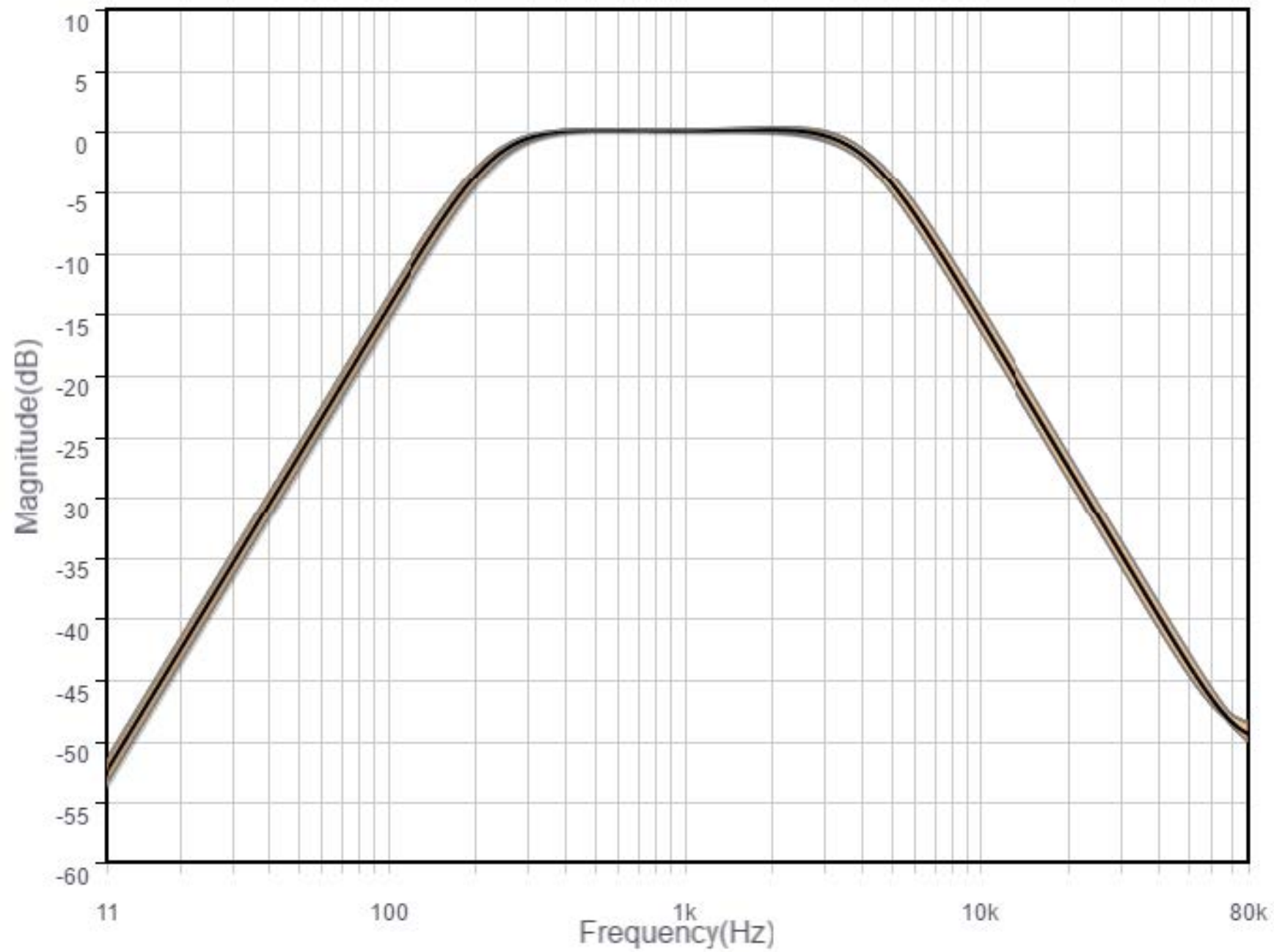
Passband: -3dB at 4.2kHz

Stopband: -40dB at 40kHz

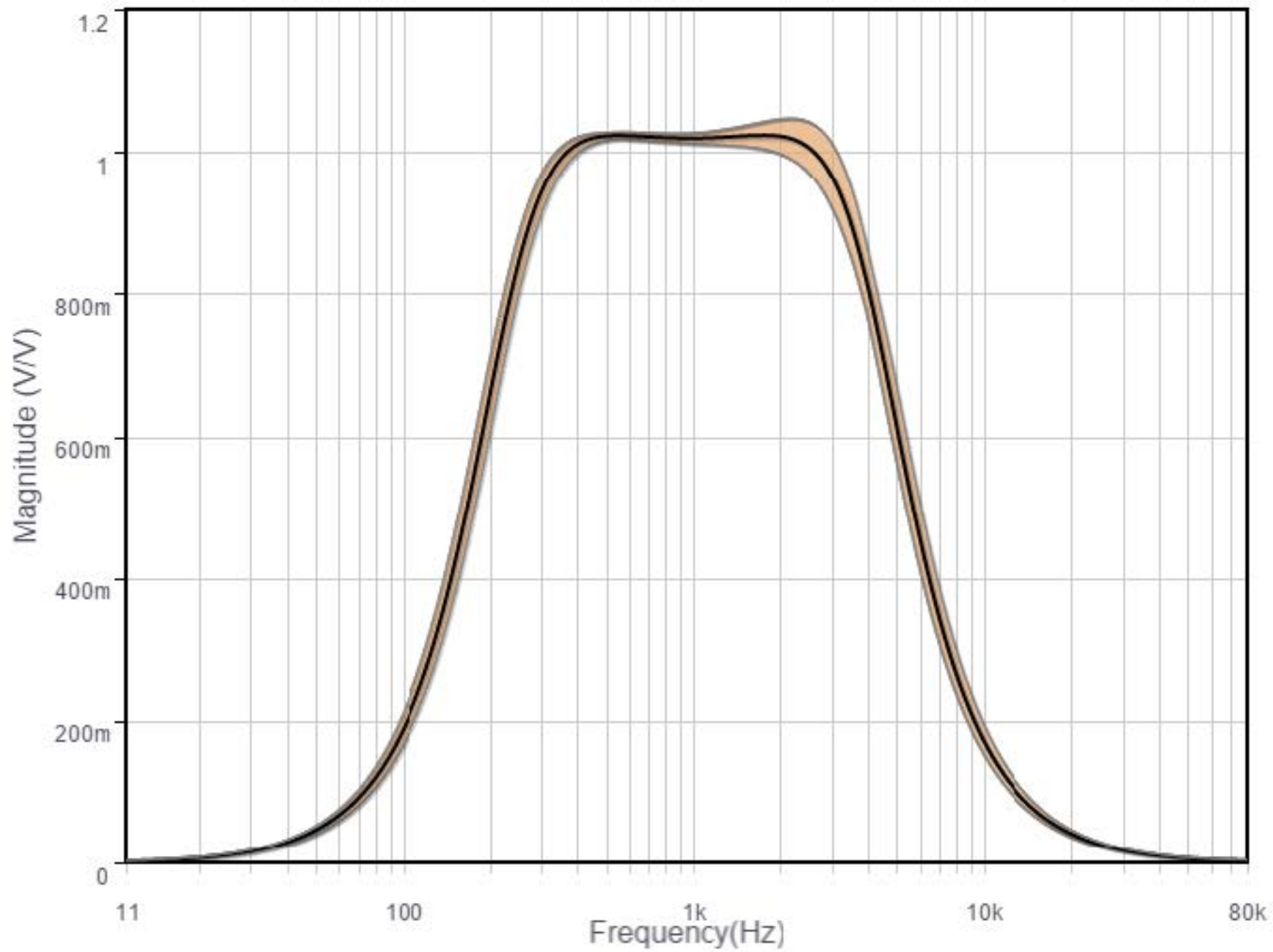
Component Tolerances: Capacitor = 5%; Resistor = 1%; Inductor = 5%; Op Amp GBW = 20%

BOM: refer to BOM.csv file

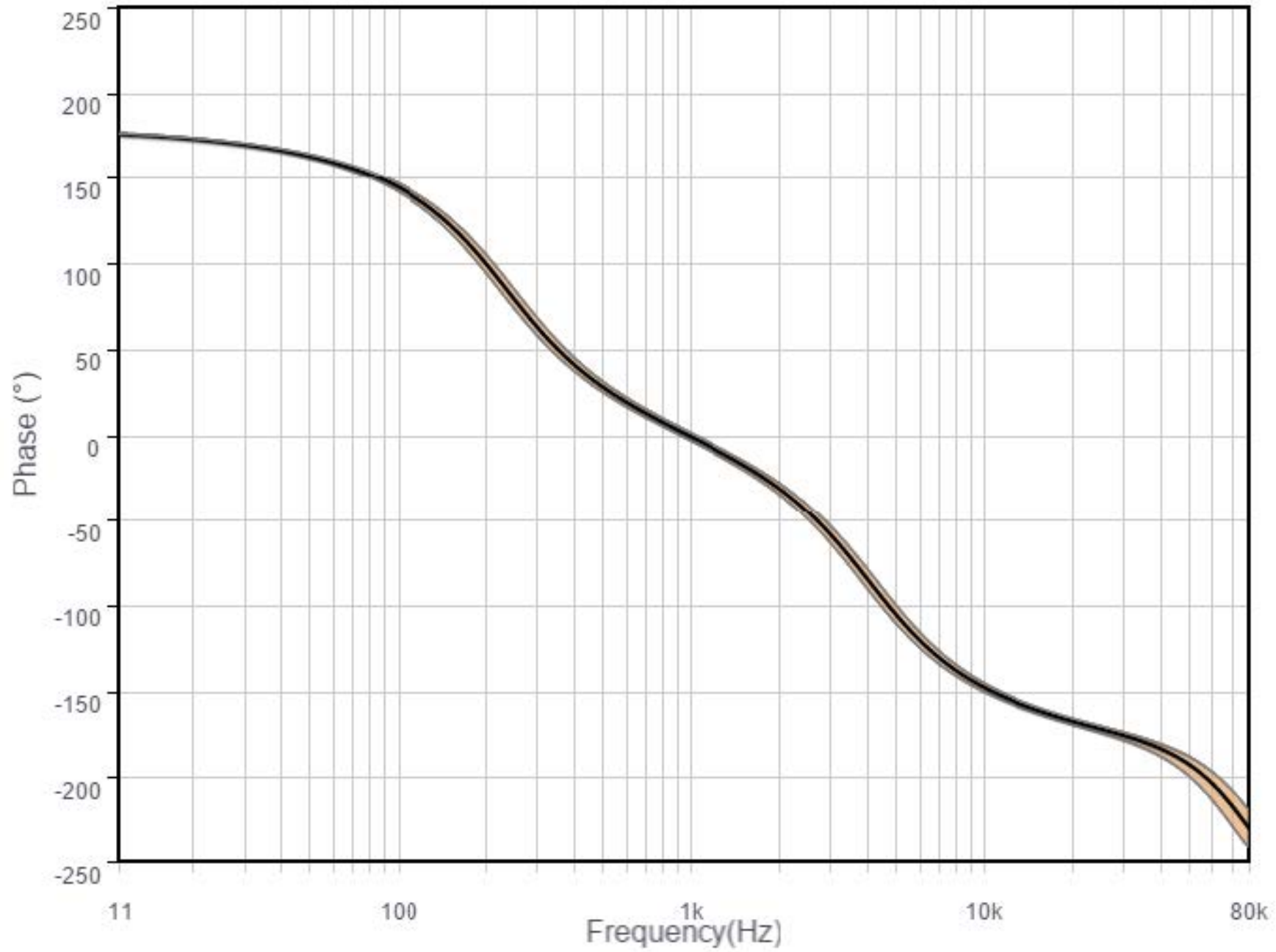
Magnitude(dB)



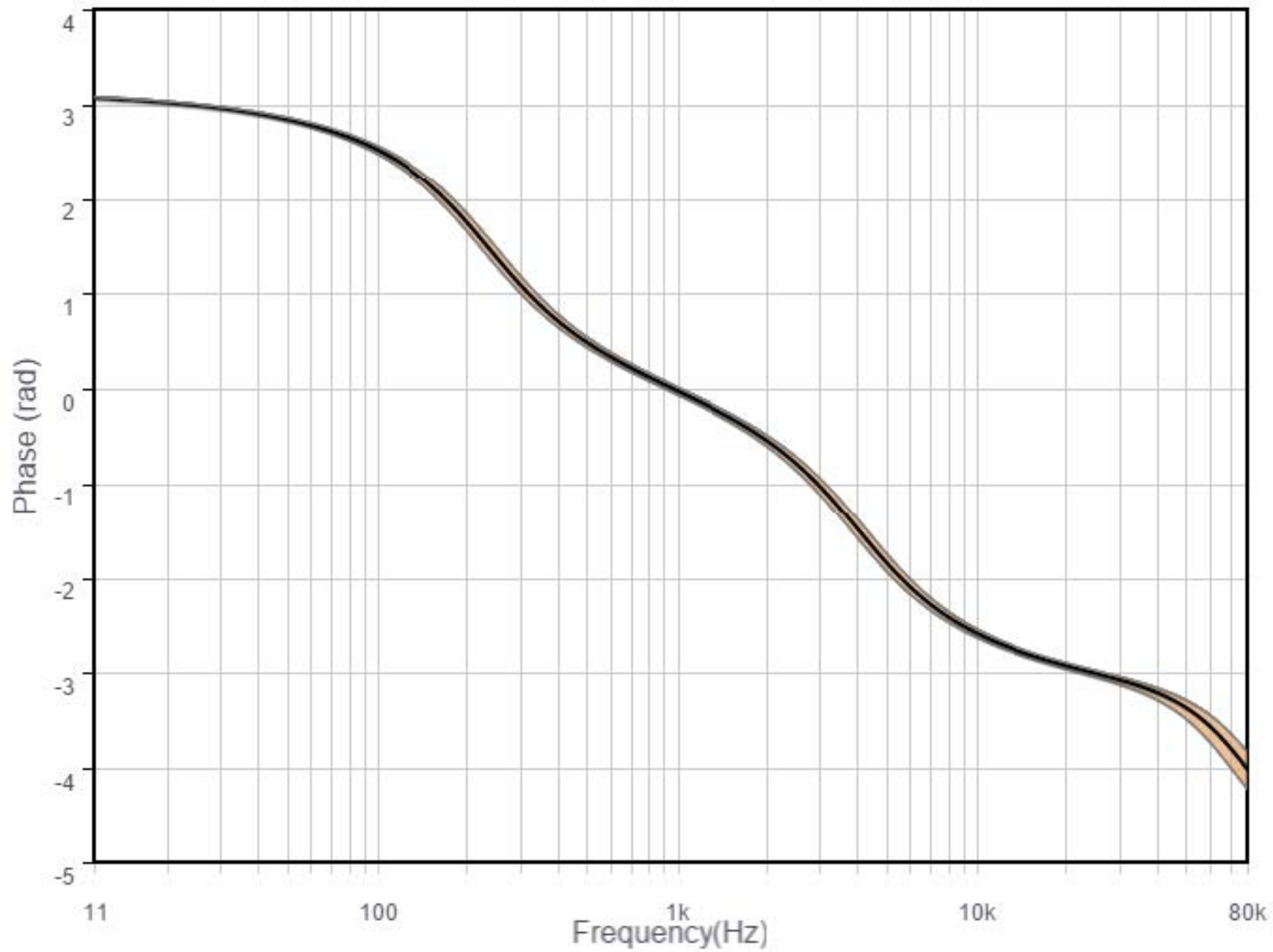
Magnitude(Volts per Volt)



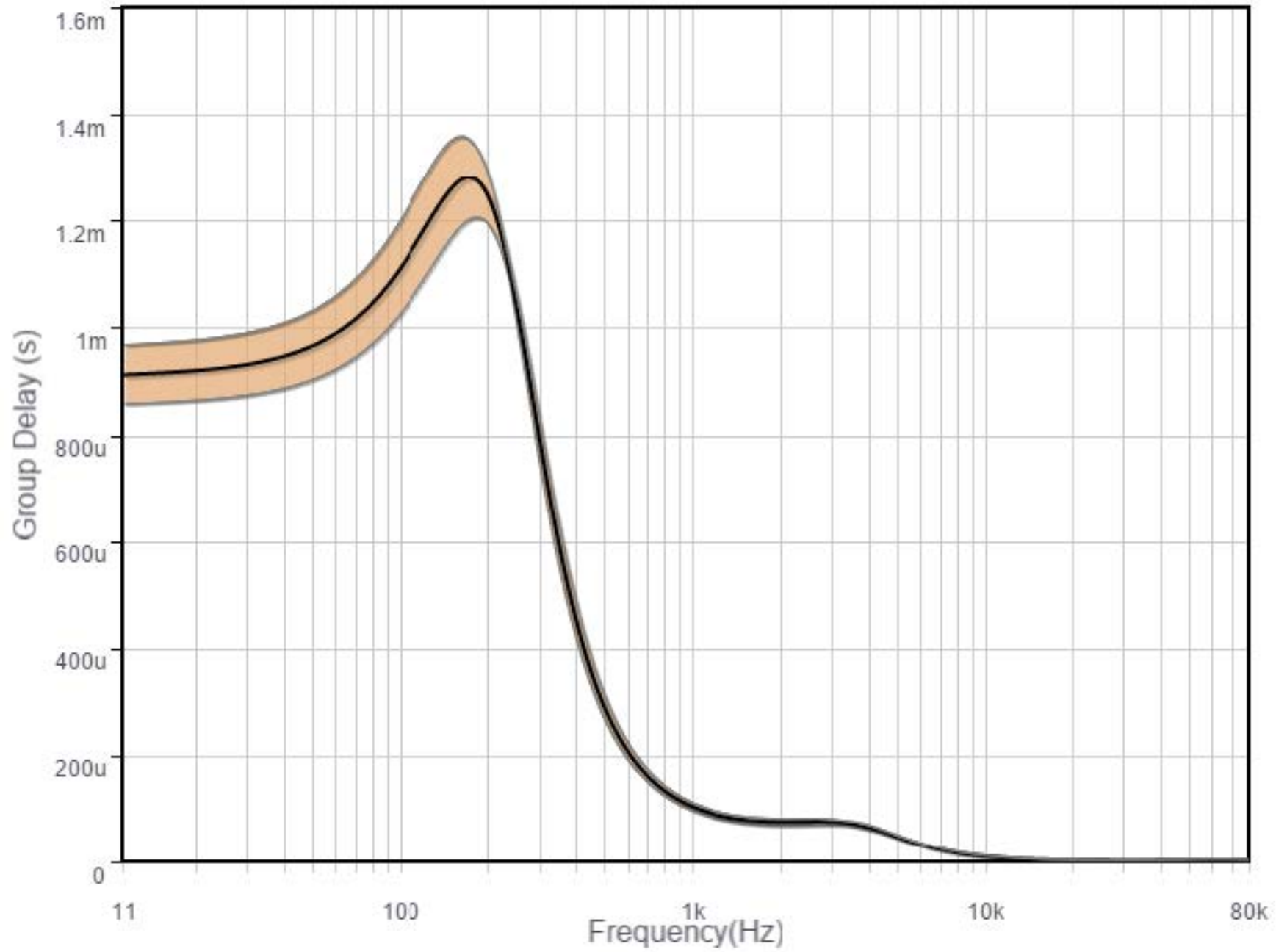
Phase(degrees)



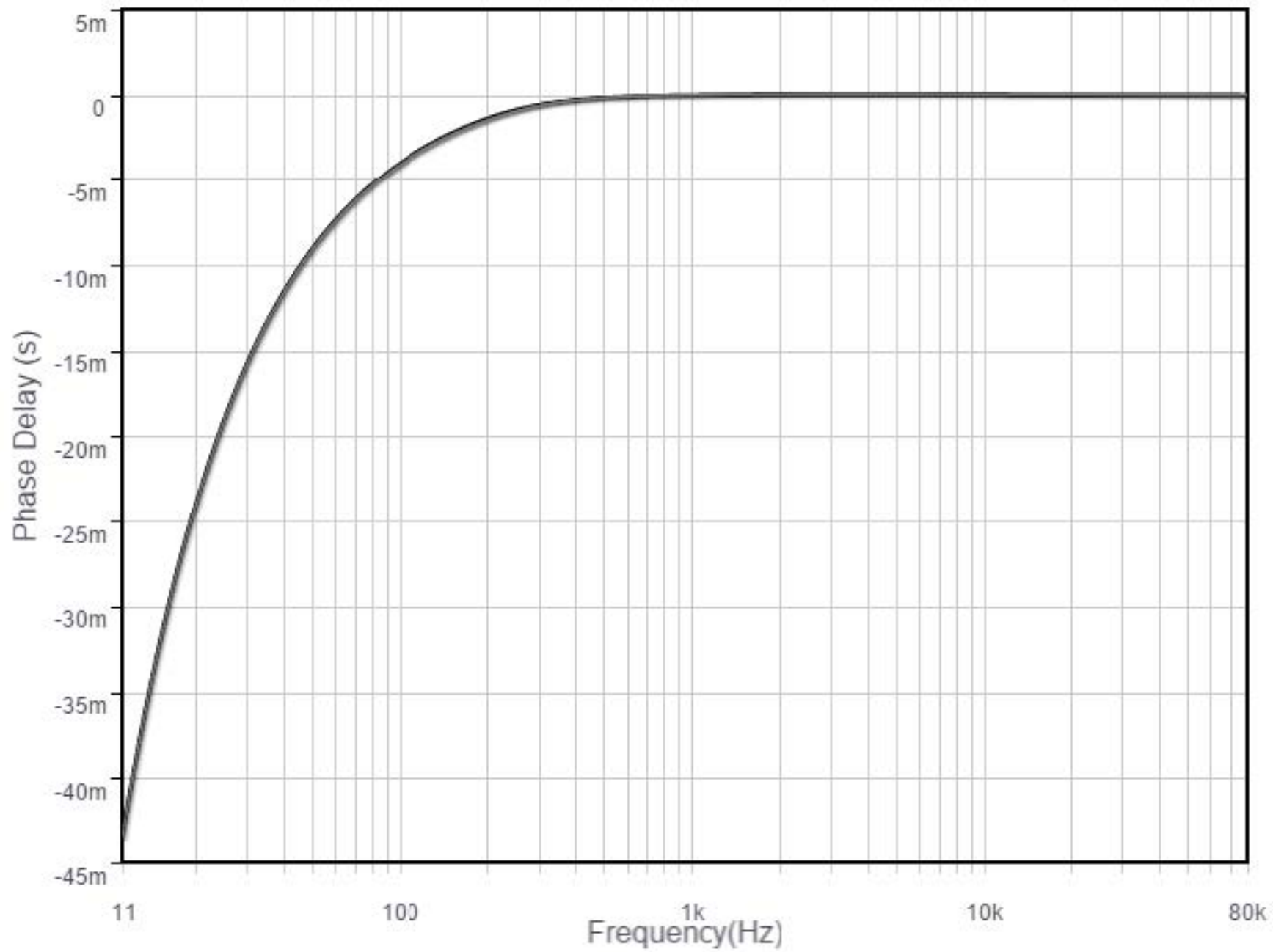
Phase(radians)



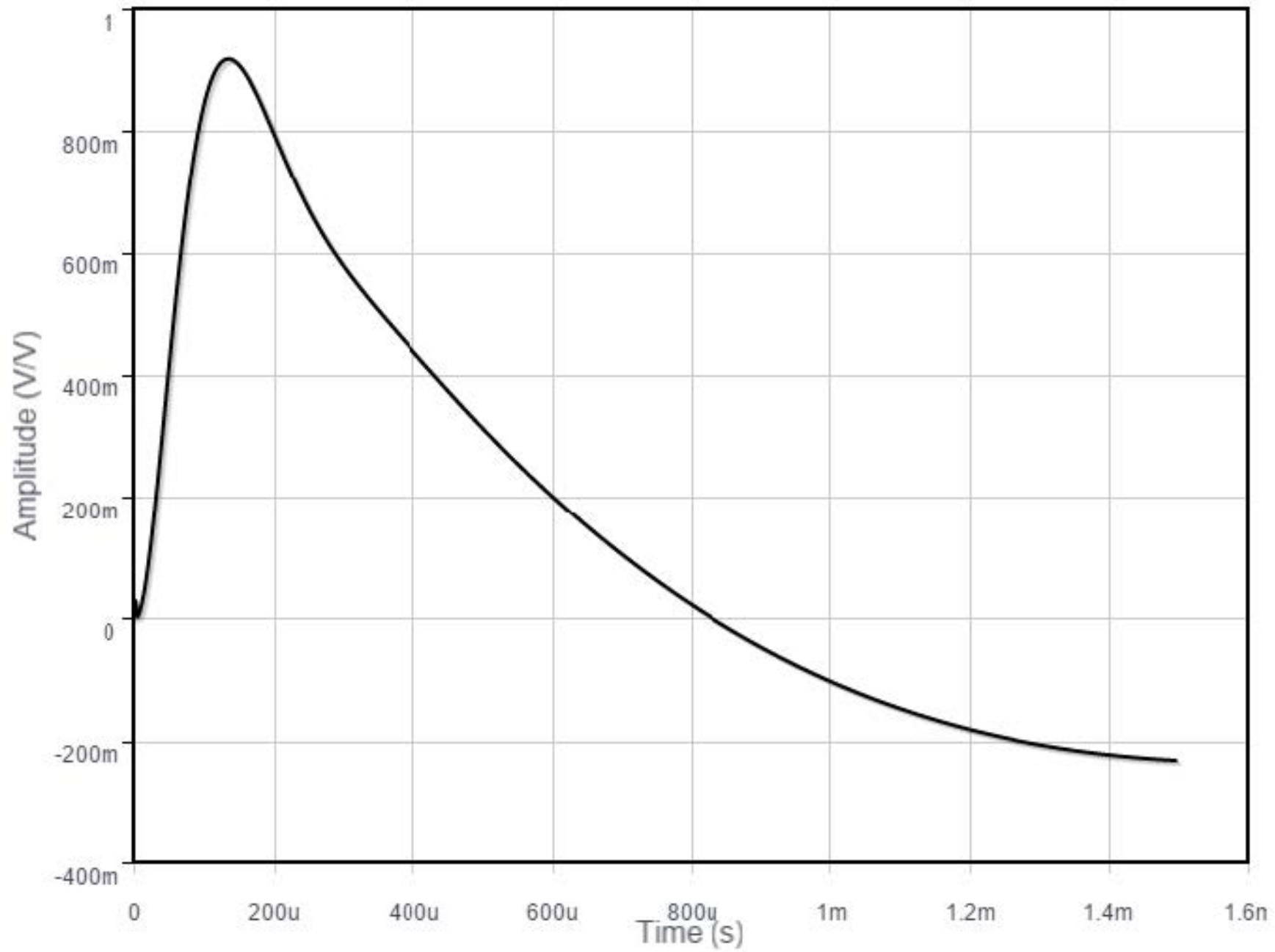
Group Delay



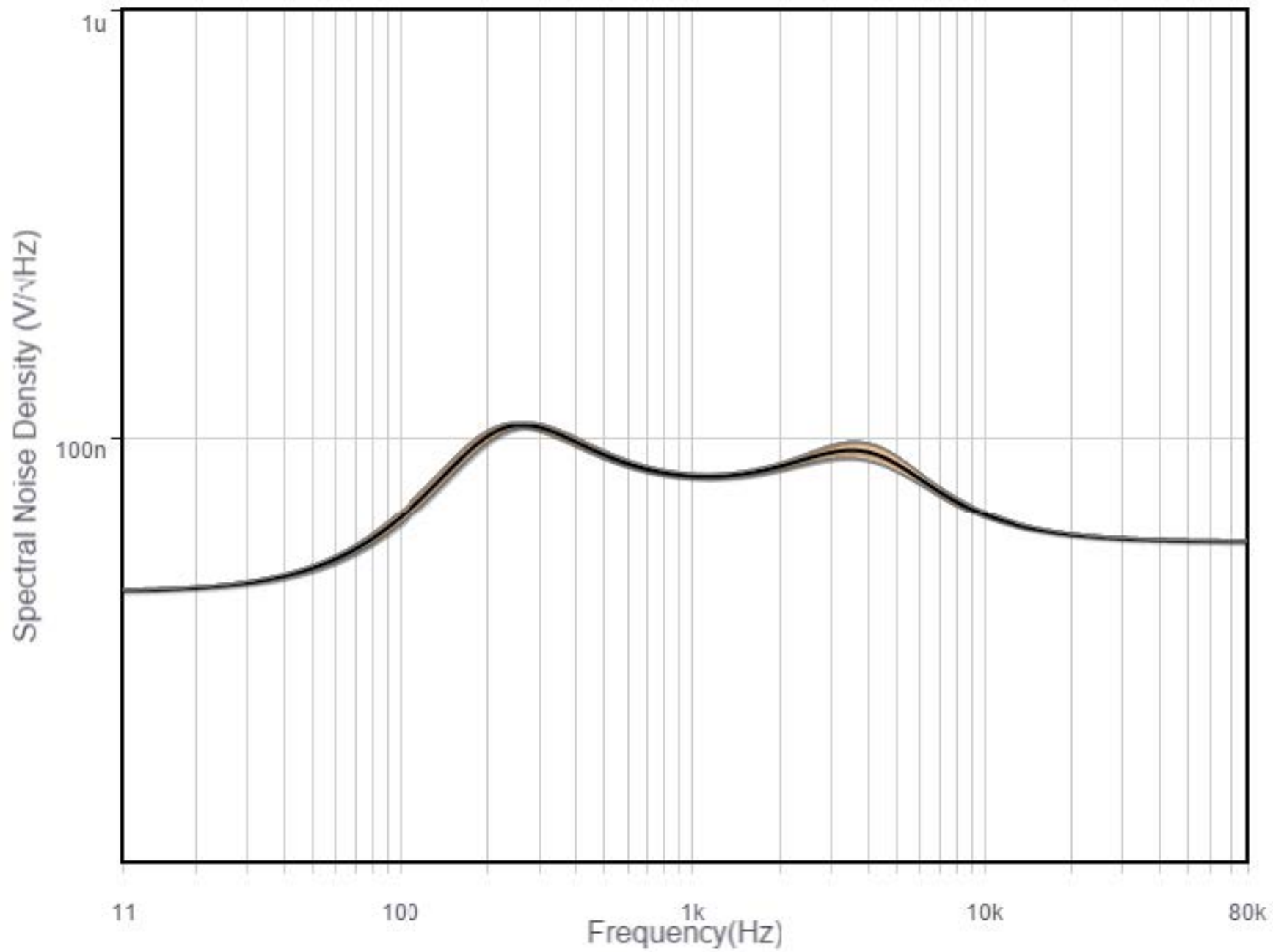
Phase Delay



Step Response



Noise



Circuit

