



## Filter Wizard

Created by Ghislain Ott on 2/18/2016



# Filter Wizard Design Report

Filter Requirements for Band-Pass, 8th order Butterworth

Specifications: Optimize for Power,  $+V_s = 5$ ,  $-V_s = -5$

Gain: 0 dB

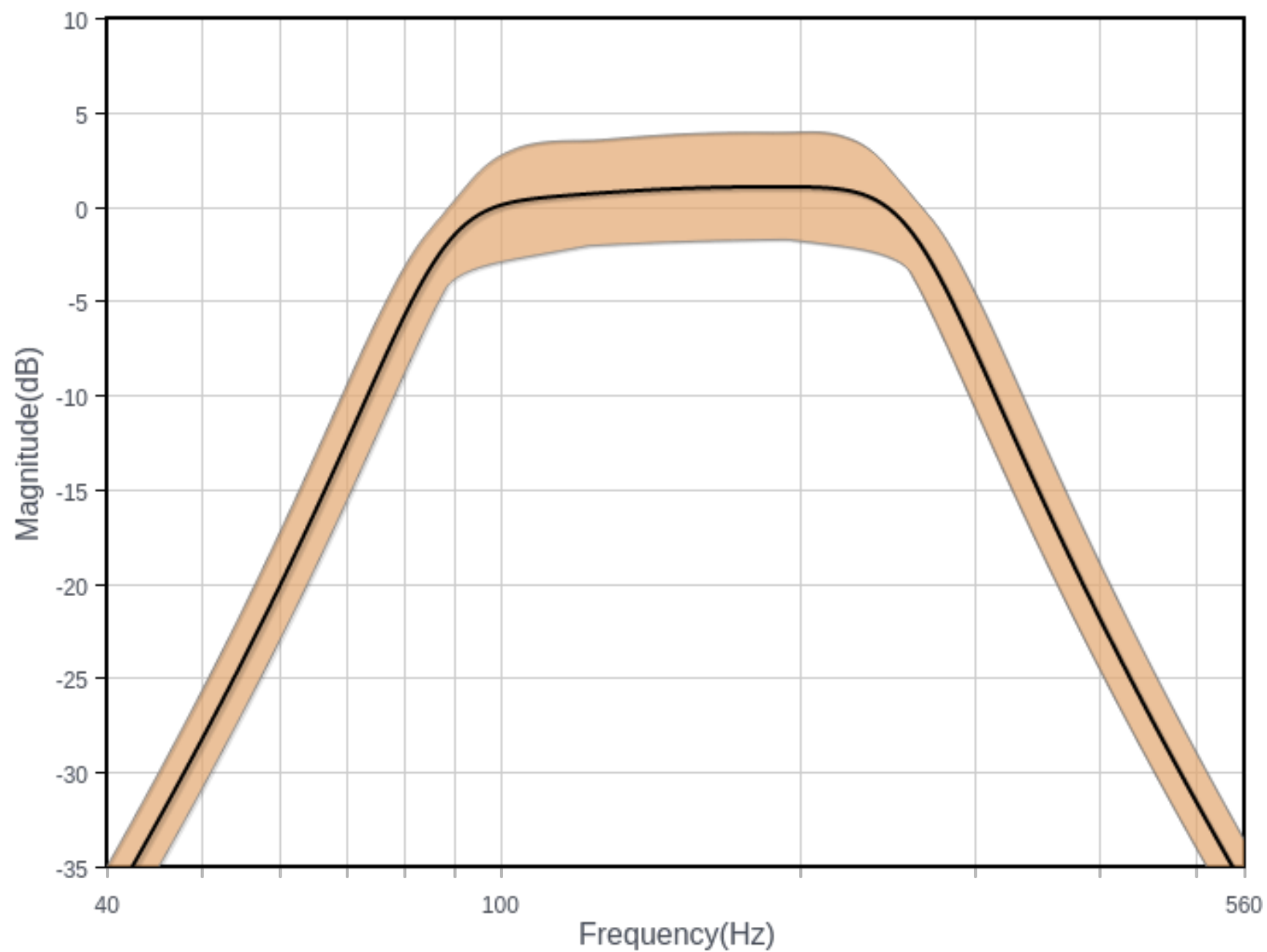
Passband: -3dB at 180Hz

Stopband: -12dB at 260Hz

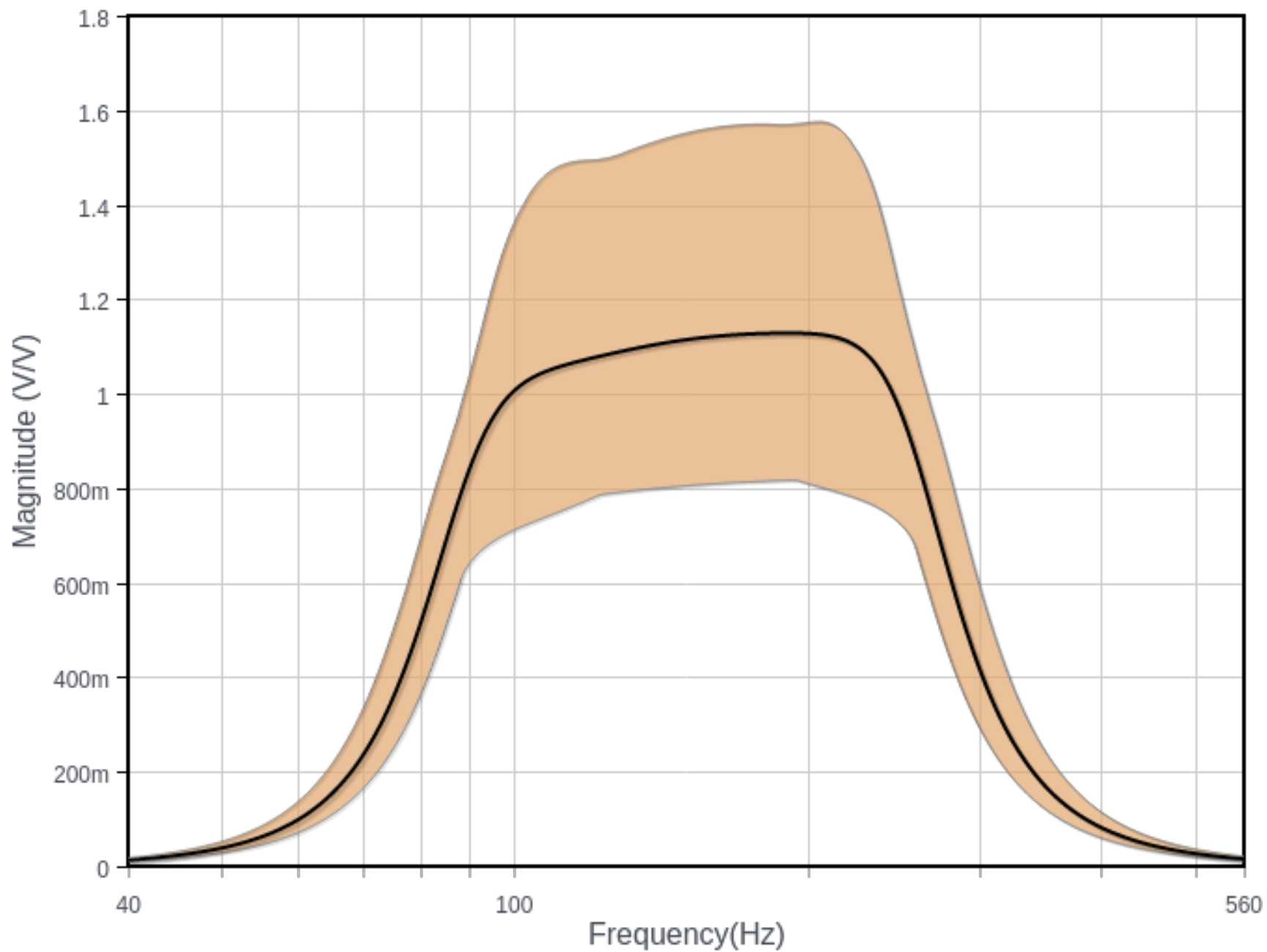
Component Tolerances: Capacitor = 5%; Resistor = 1%; Inductor = 5%; Op Amp GBW = 20%

BOM: refer to BOM.csv file

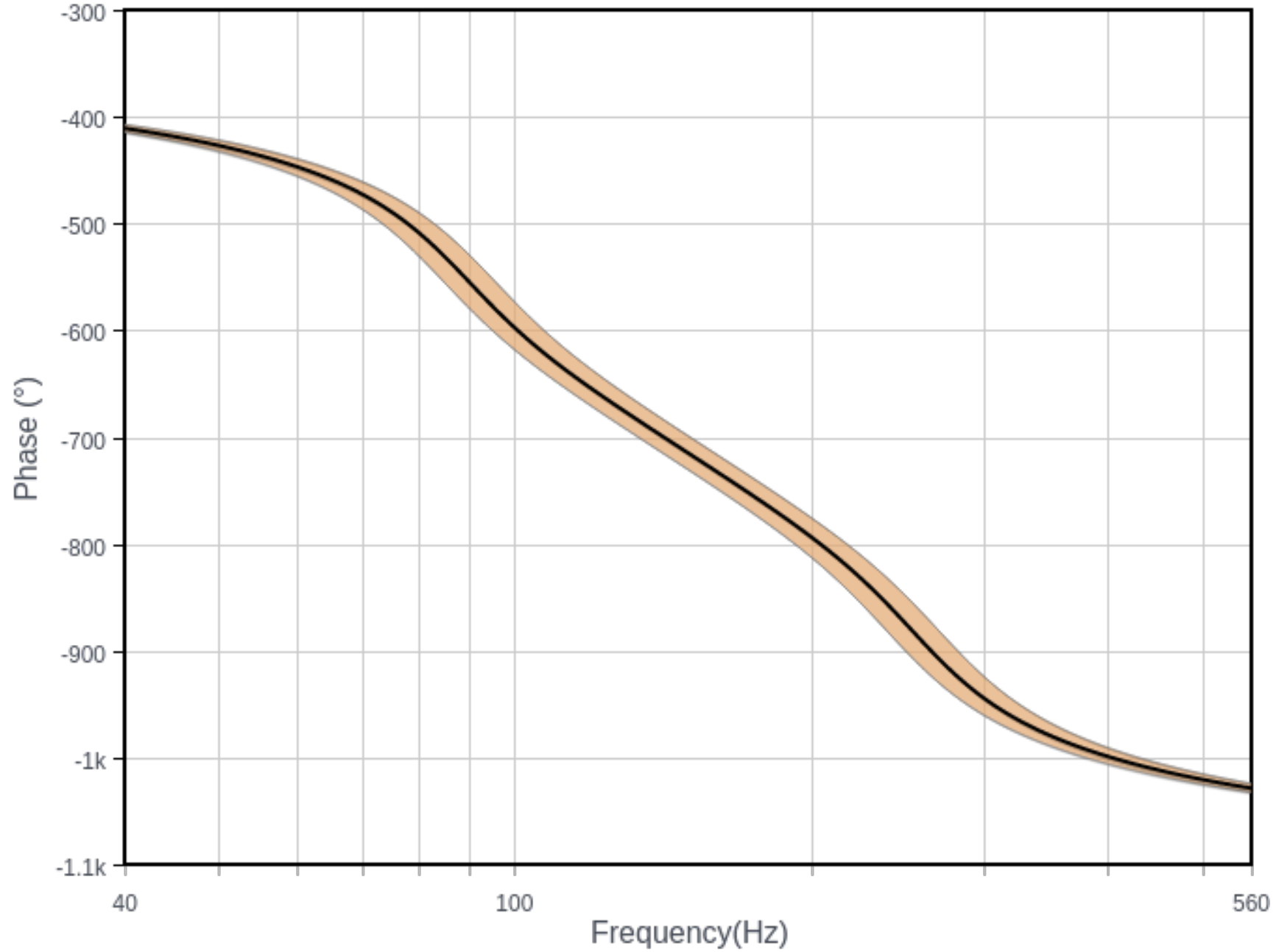
Magnitude(dB)



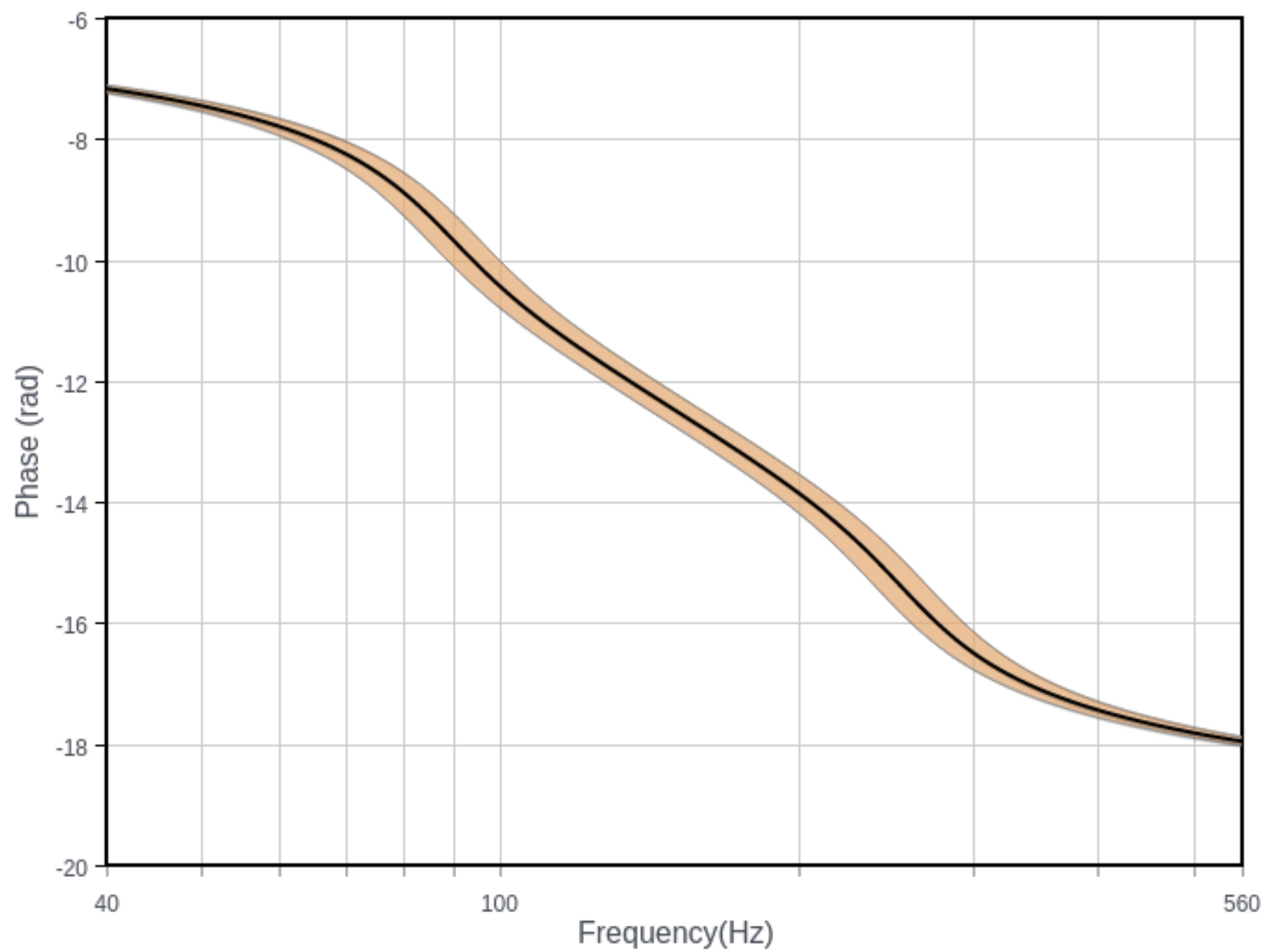
Magnitude(Volts per Volt)



Phase(degrees)

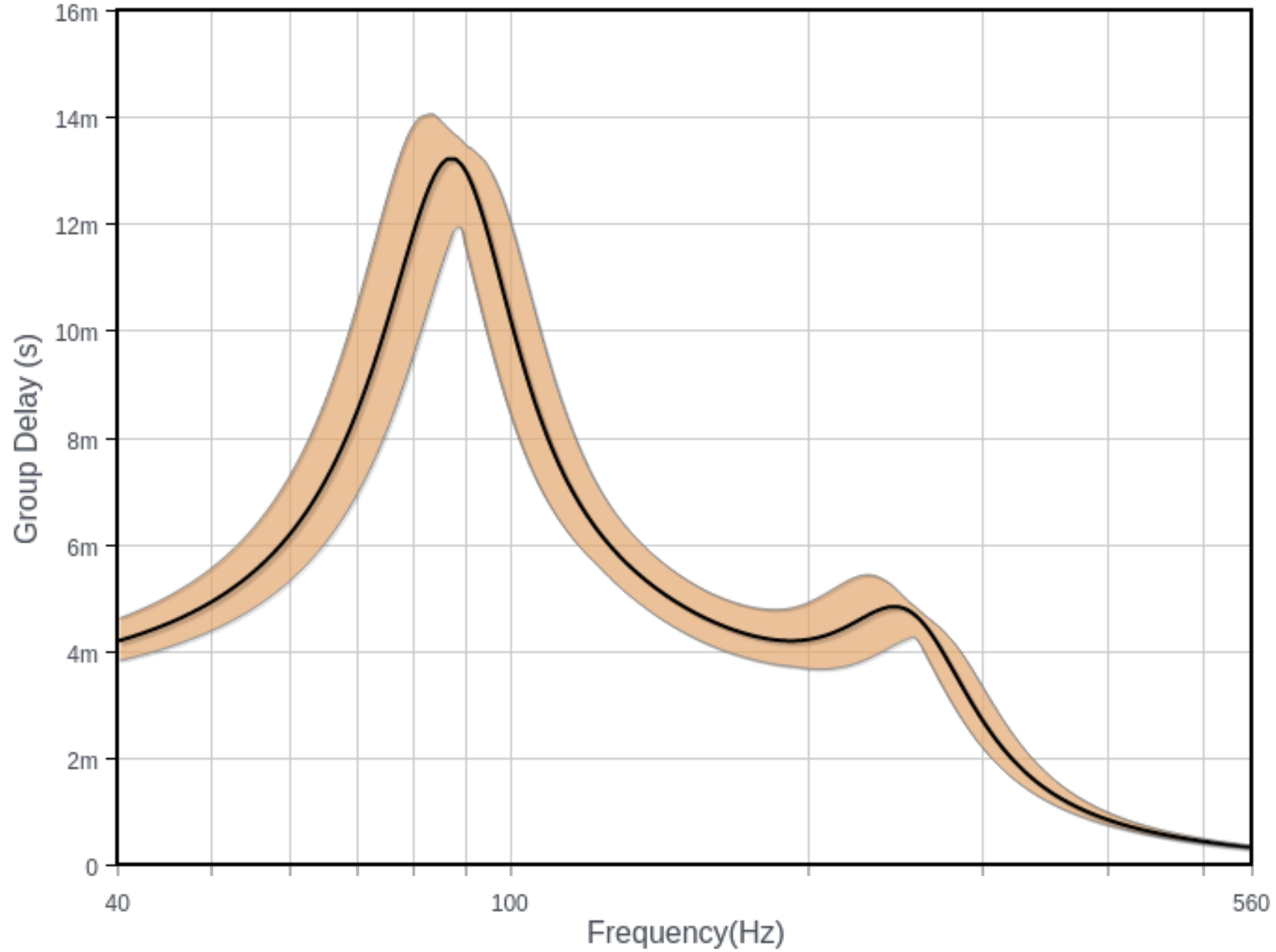


Phase(radians)

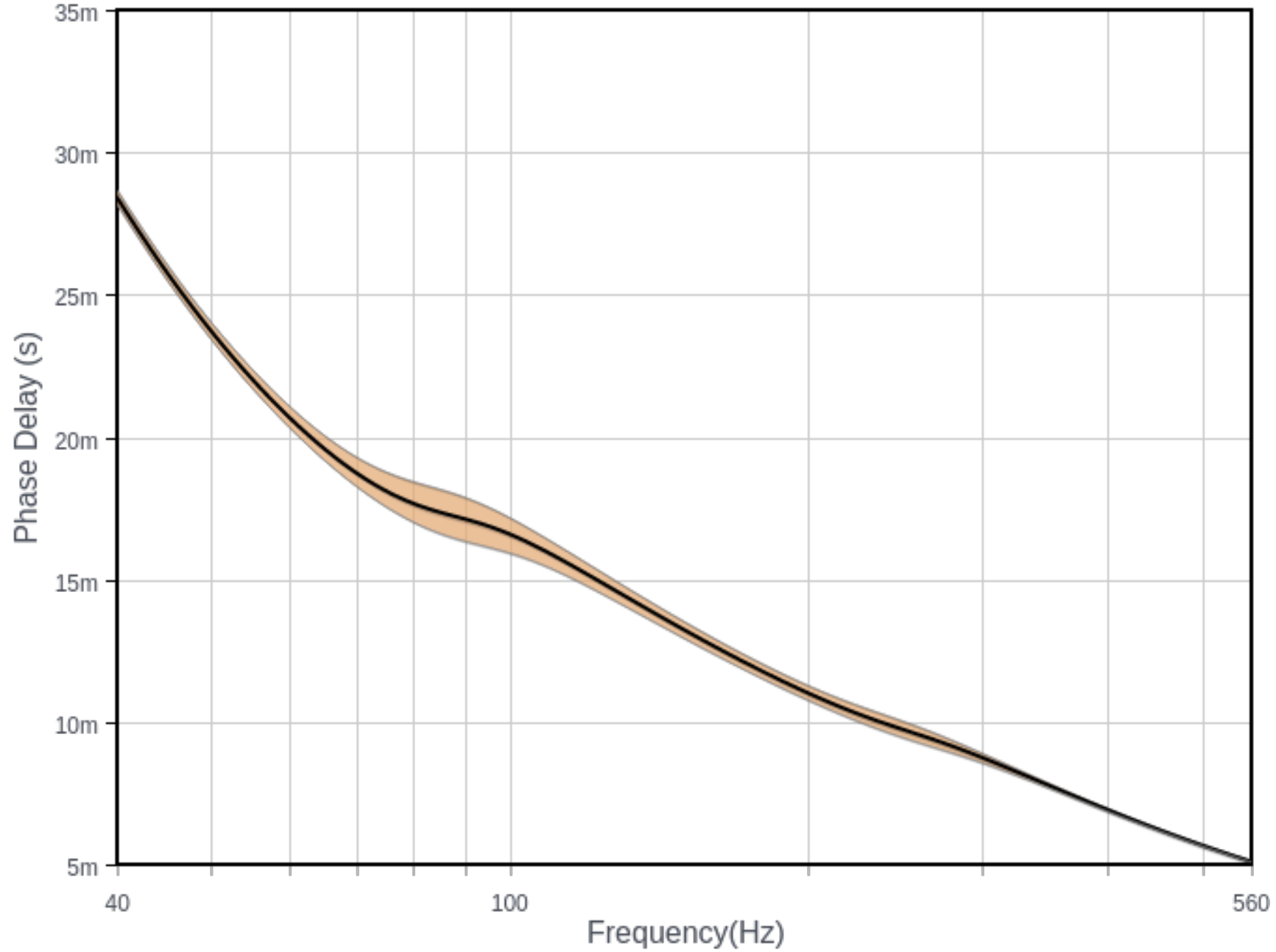




Group Delay

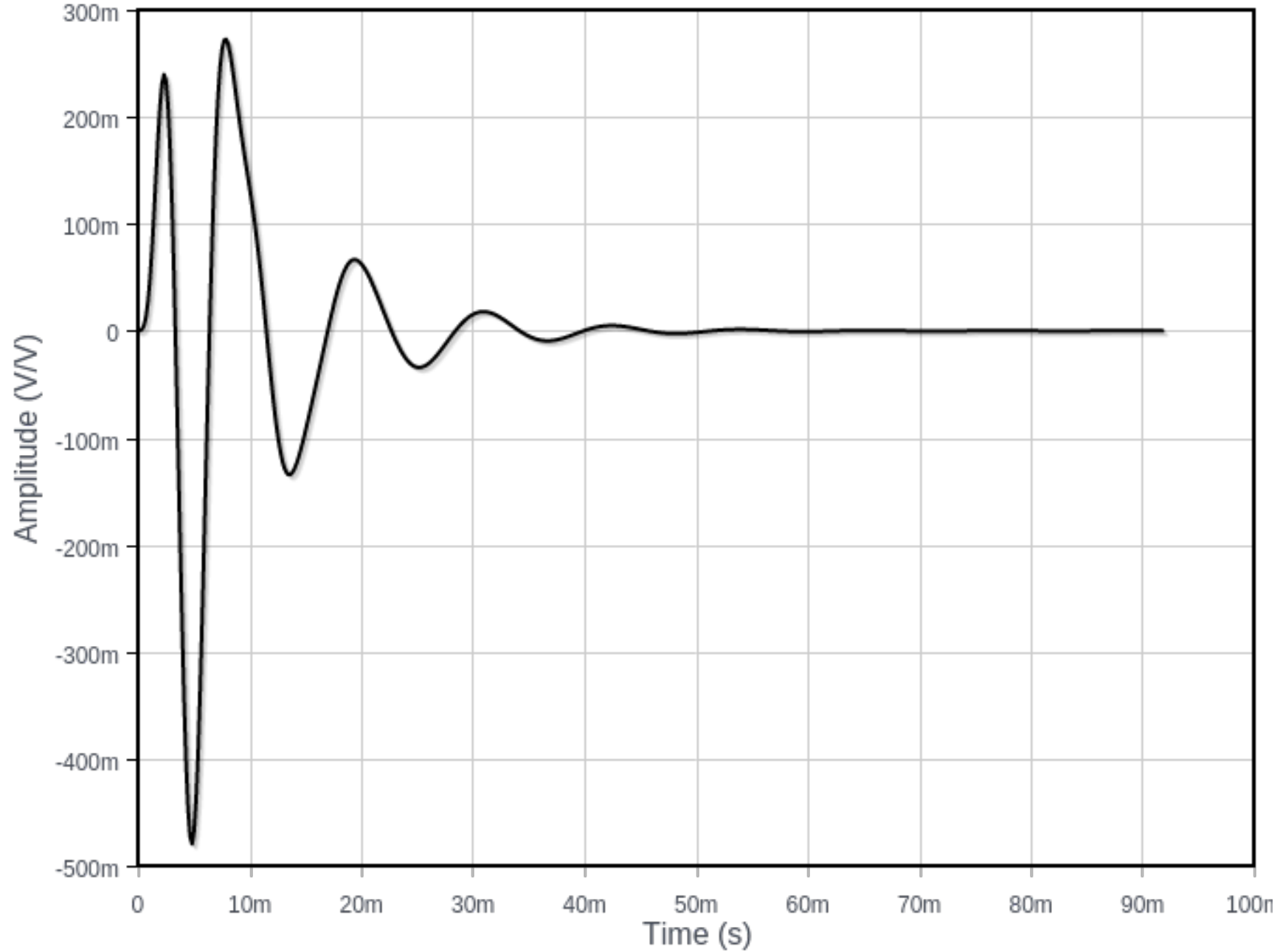


Phase Delay

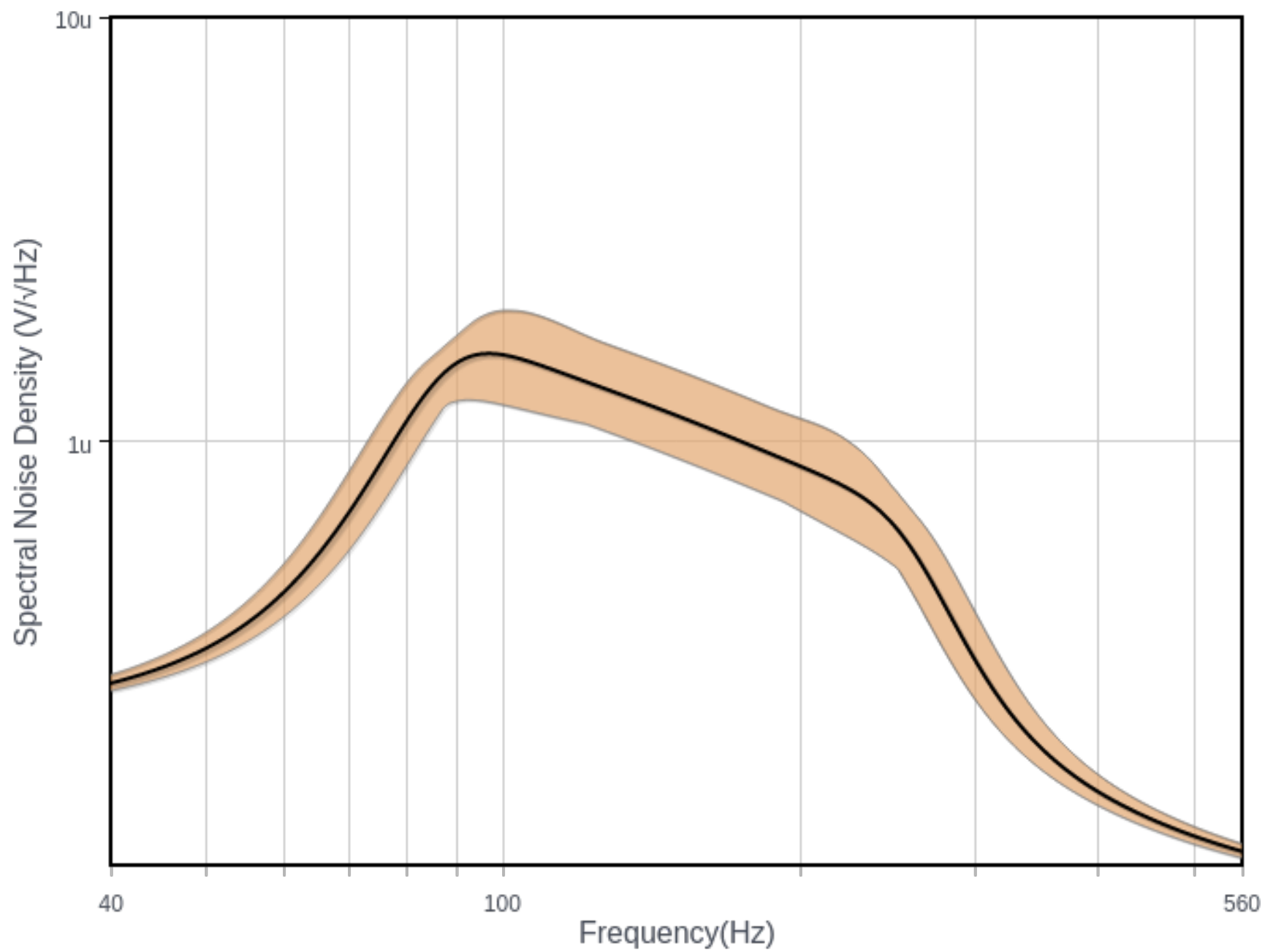




## Step Response



# Noise



# Circuit

