



Filter Wizard

DesignFilesSubsonic5Hz

Created on 06/18/2024



Filter Wizard Design Report

Filter Requirements for High-Pass, 4th order Butterworth

Specifications: Optimize: Specific Parts; +Vs: 15; -Vs: -15

Gain: 0 dB

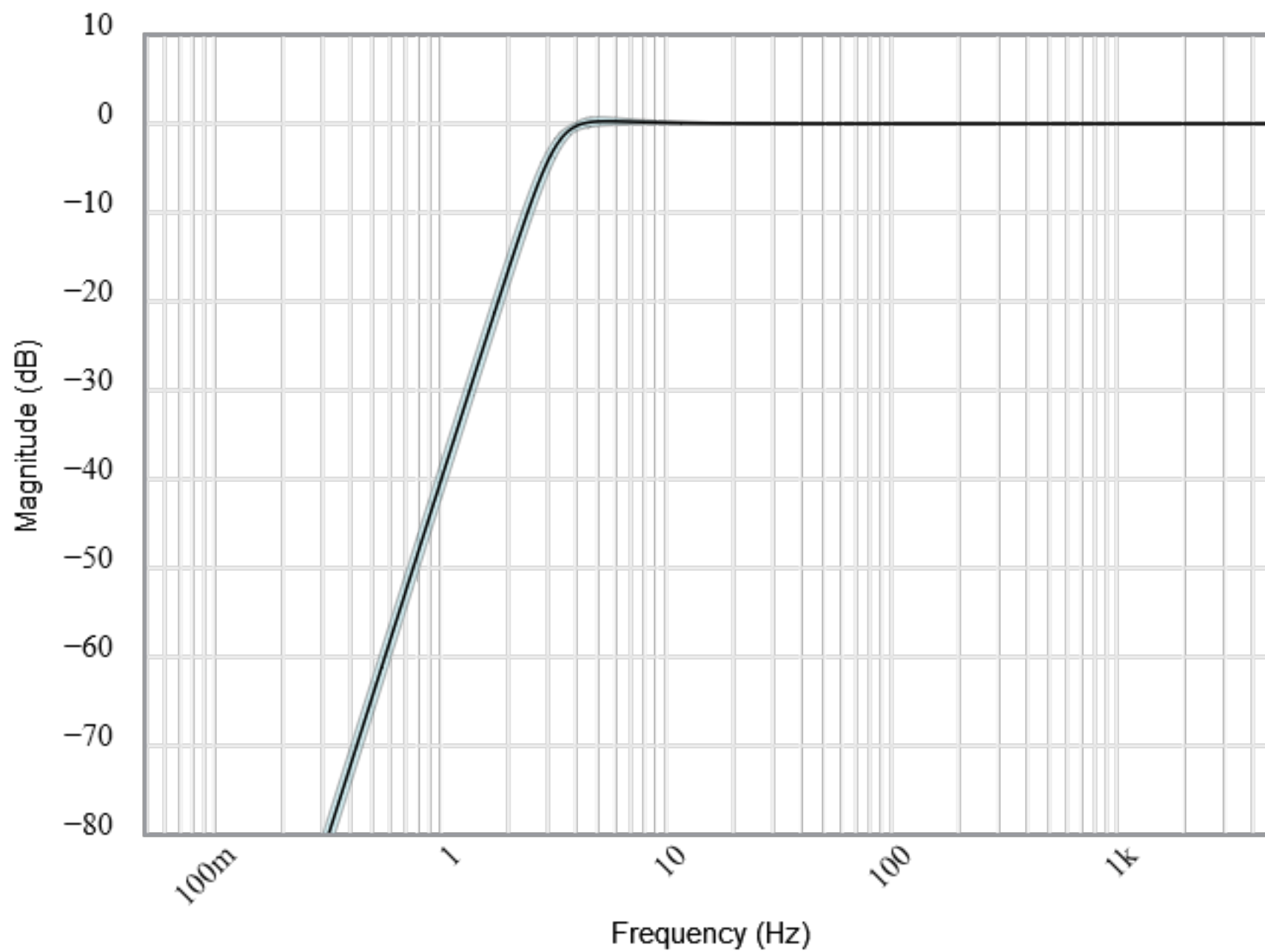
Passband: -0.1dB at 5Hz

Stopband: -60dB at 500mHz

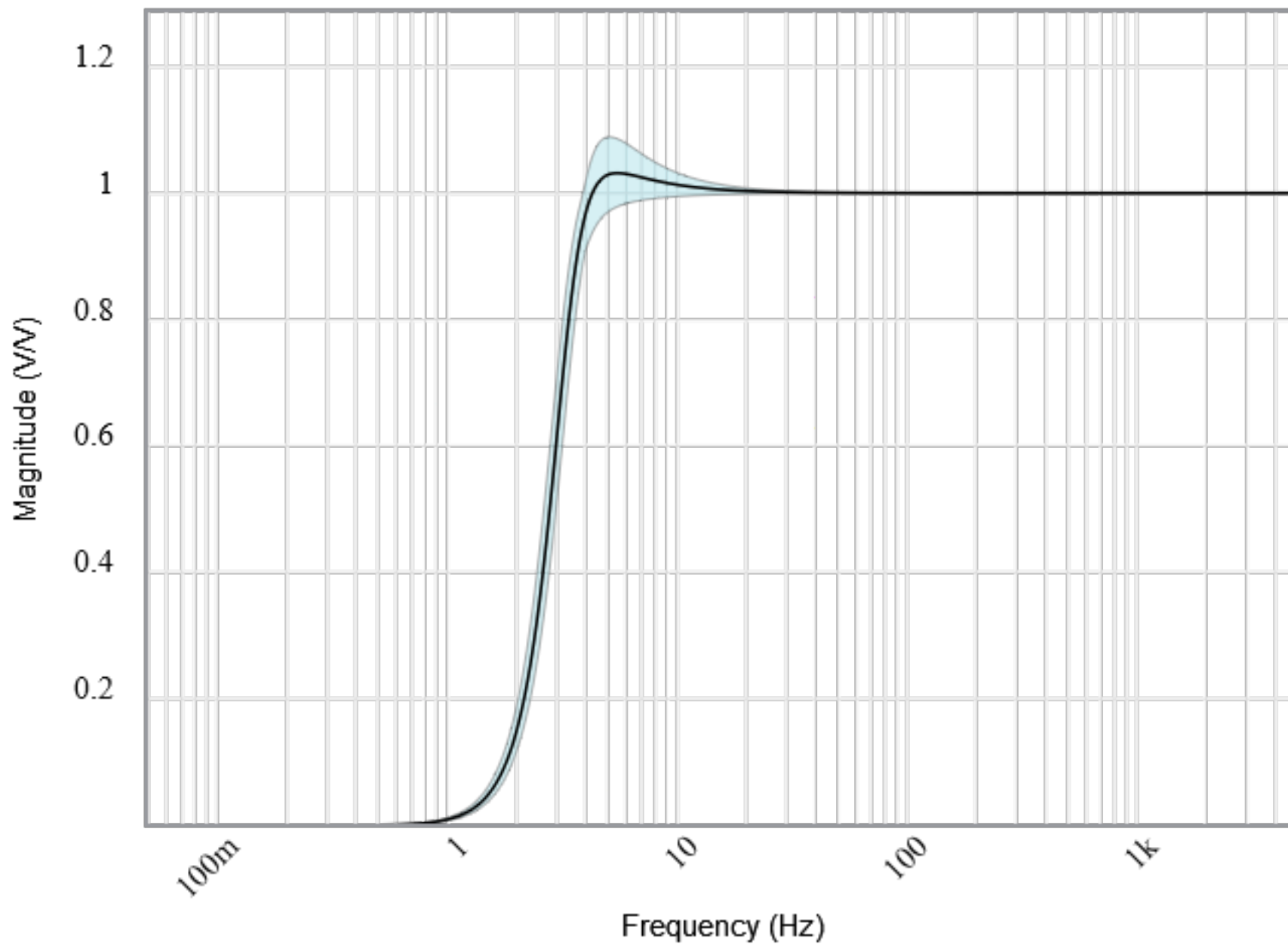
Component Tolerances: Capacitor = 5%; Resistor = 1%; Inductor = 5%; Op Amp GBW = 20%

BOM: refer to BOM.csv file

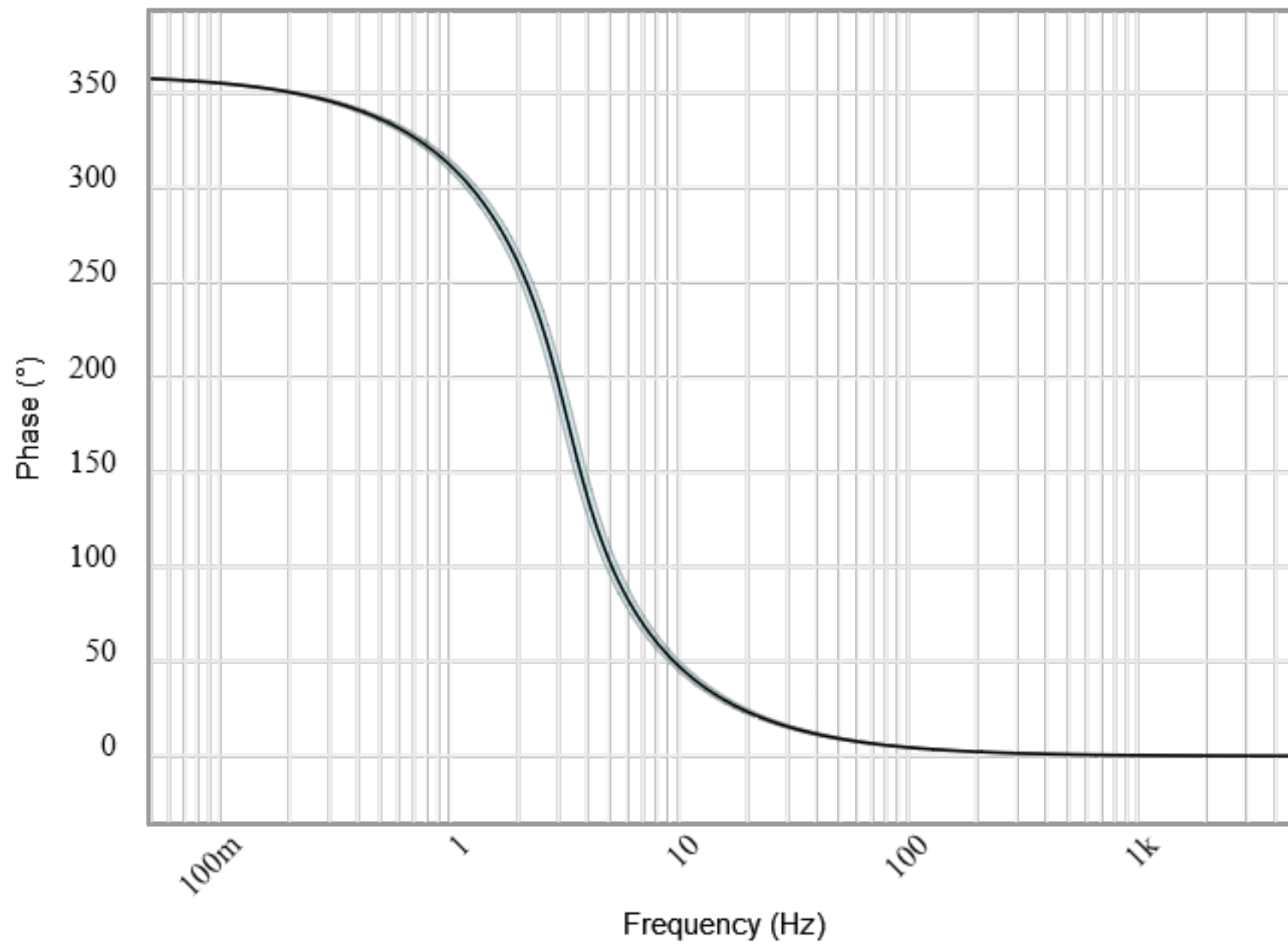
Magnitude(dB)



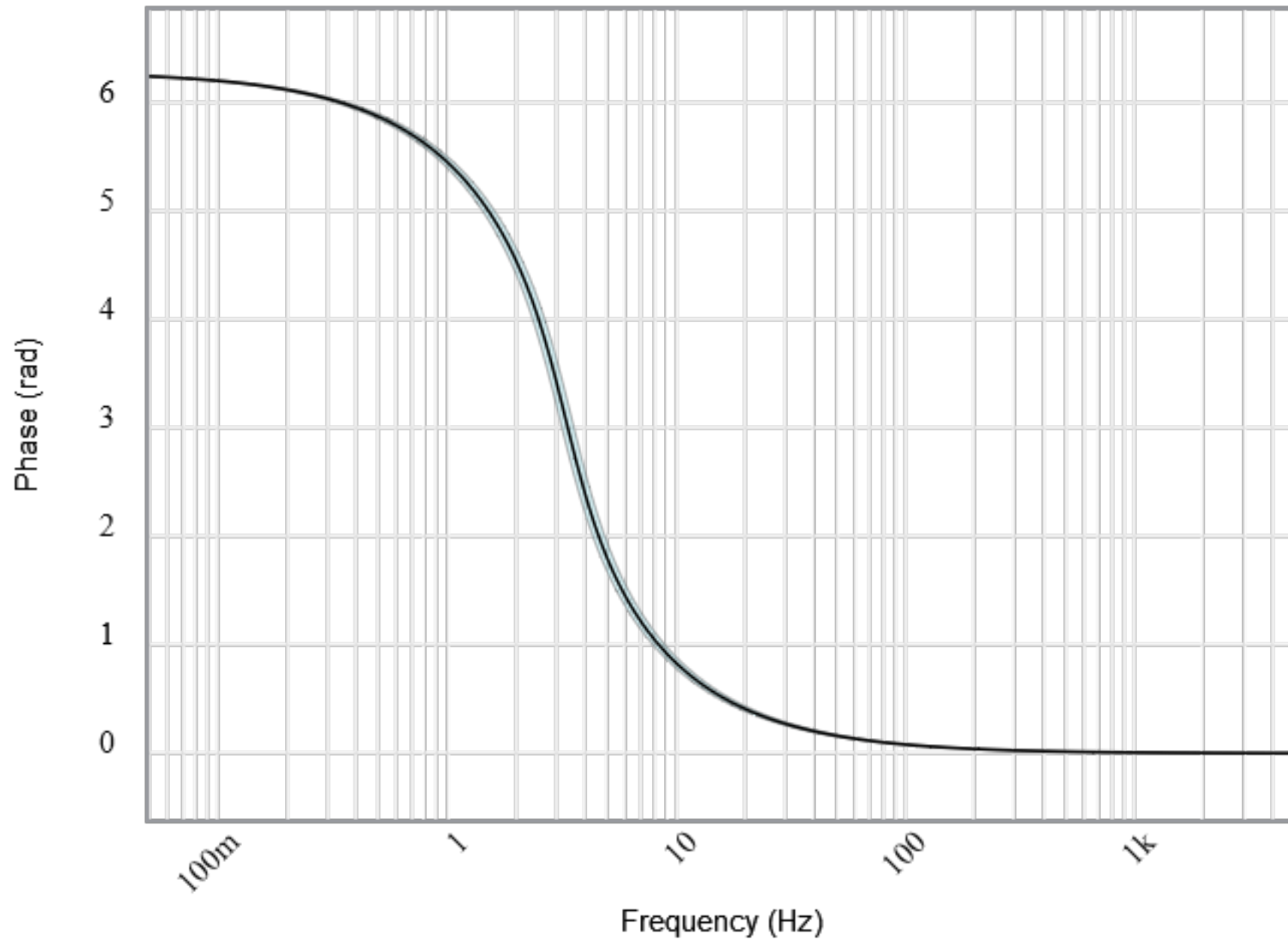
Magnitude(Volts per Volt)



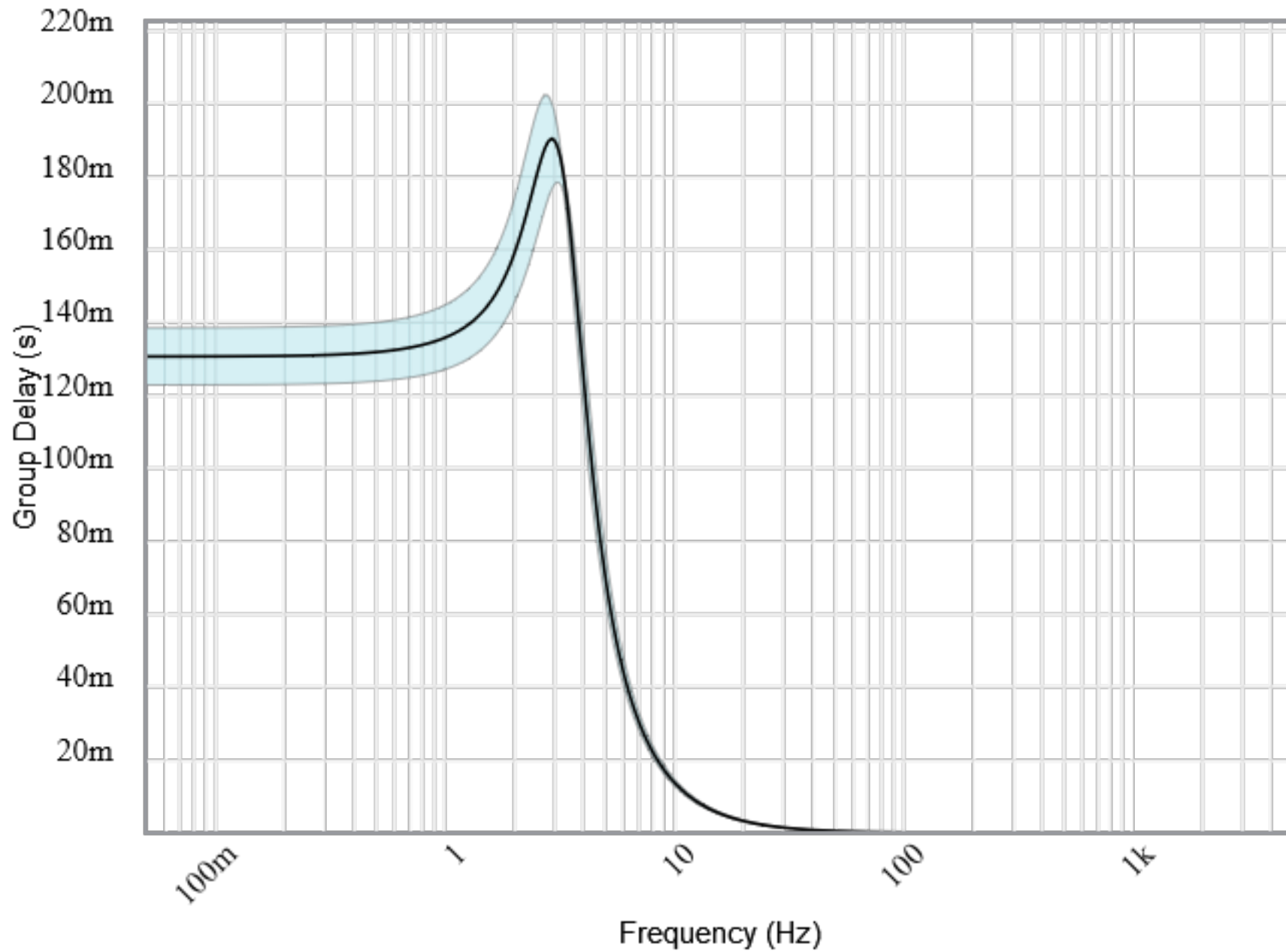
Phase(degrees)



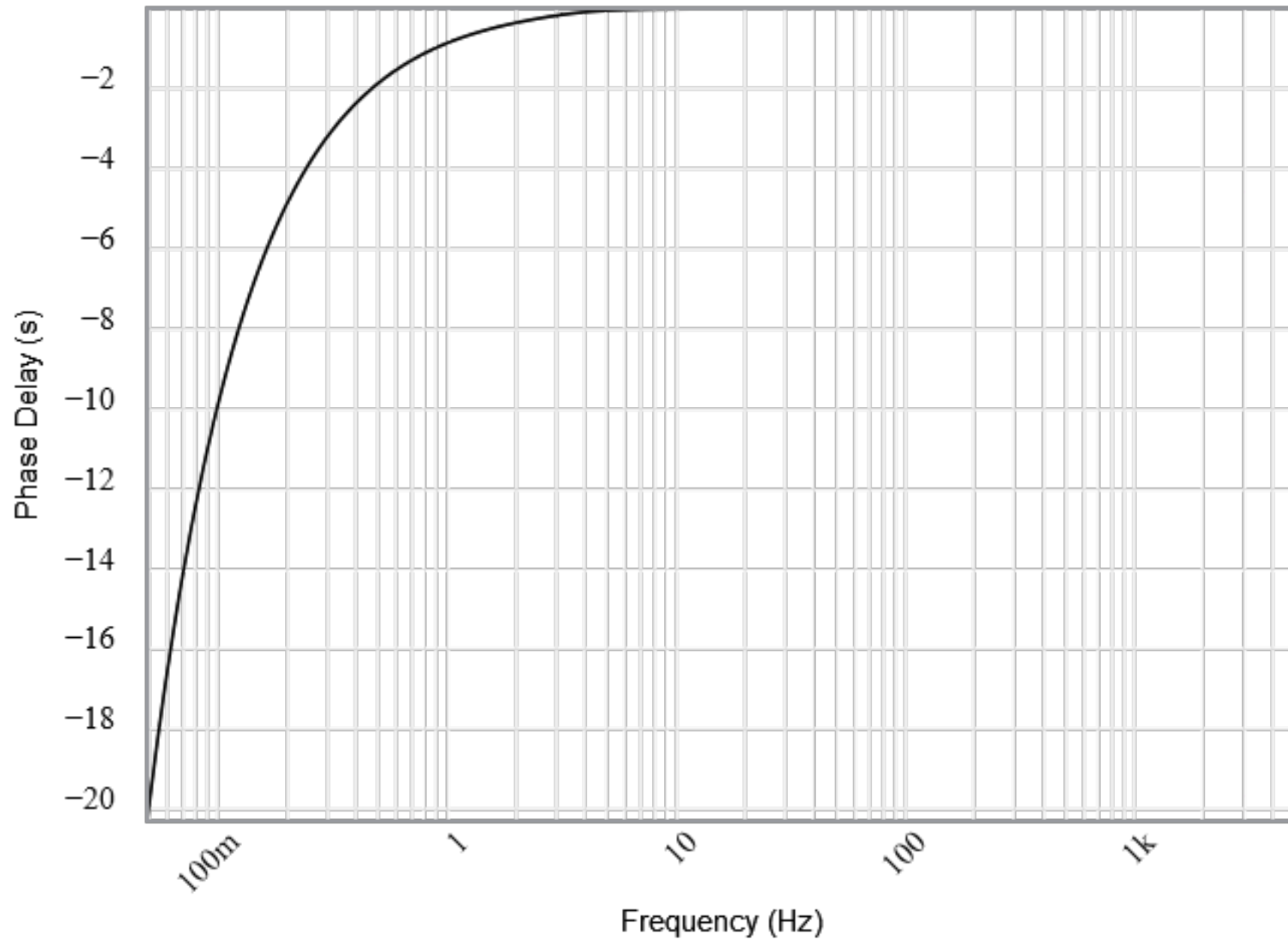
Phase(radians)



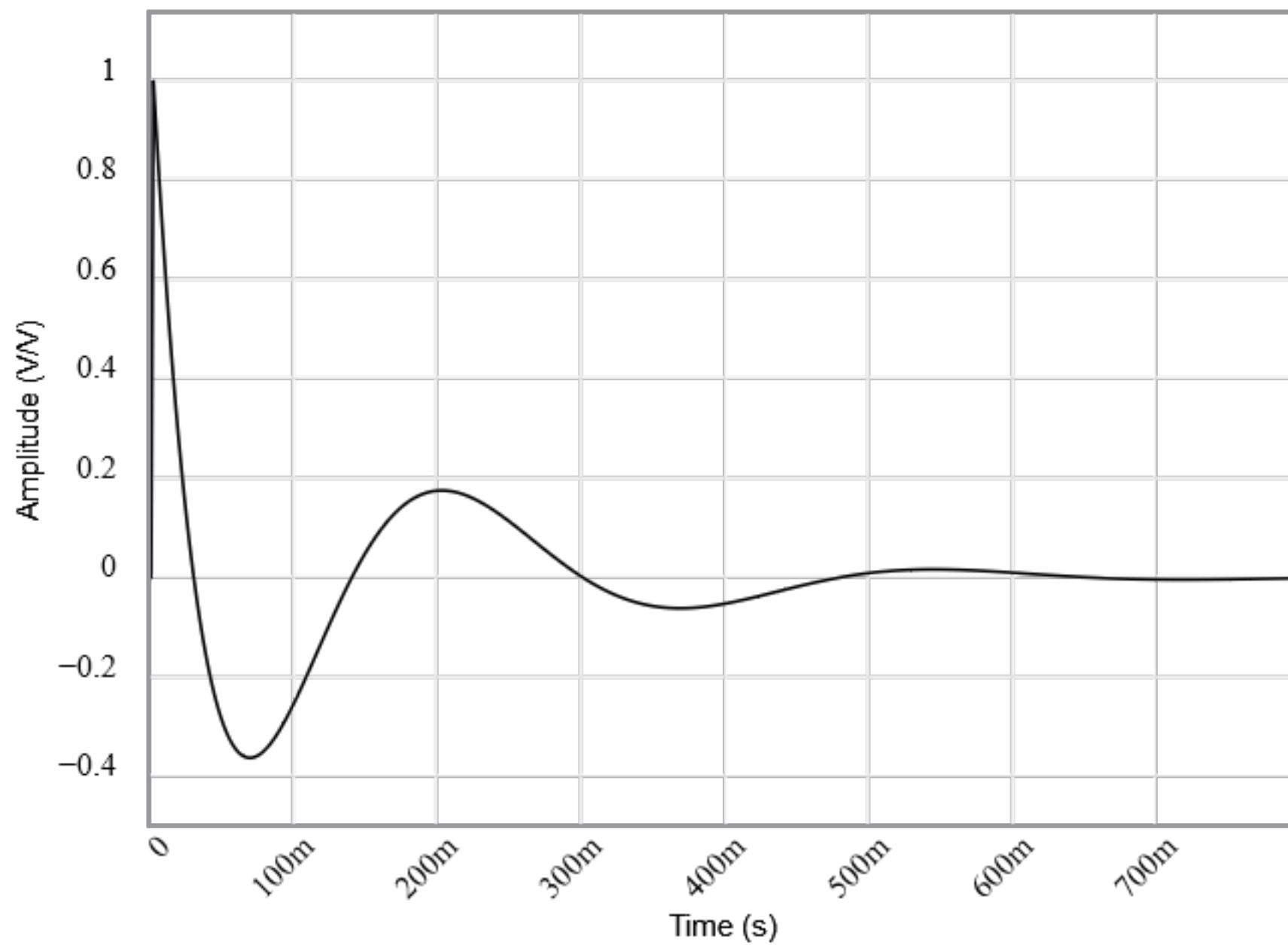
Group Delay



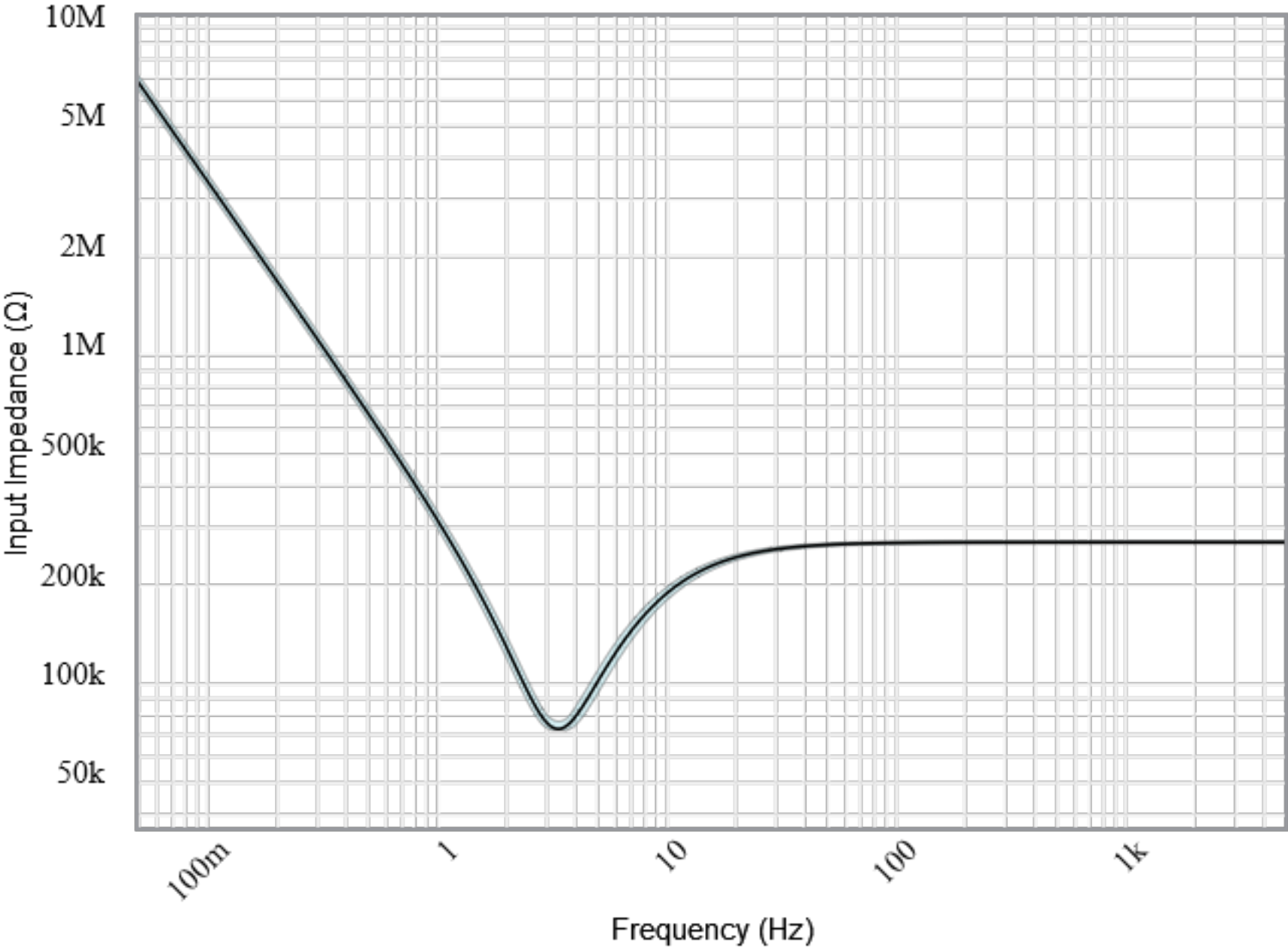
Phase Delay



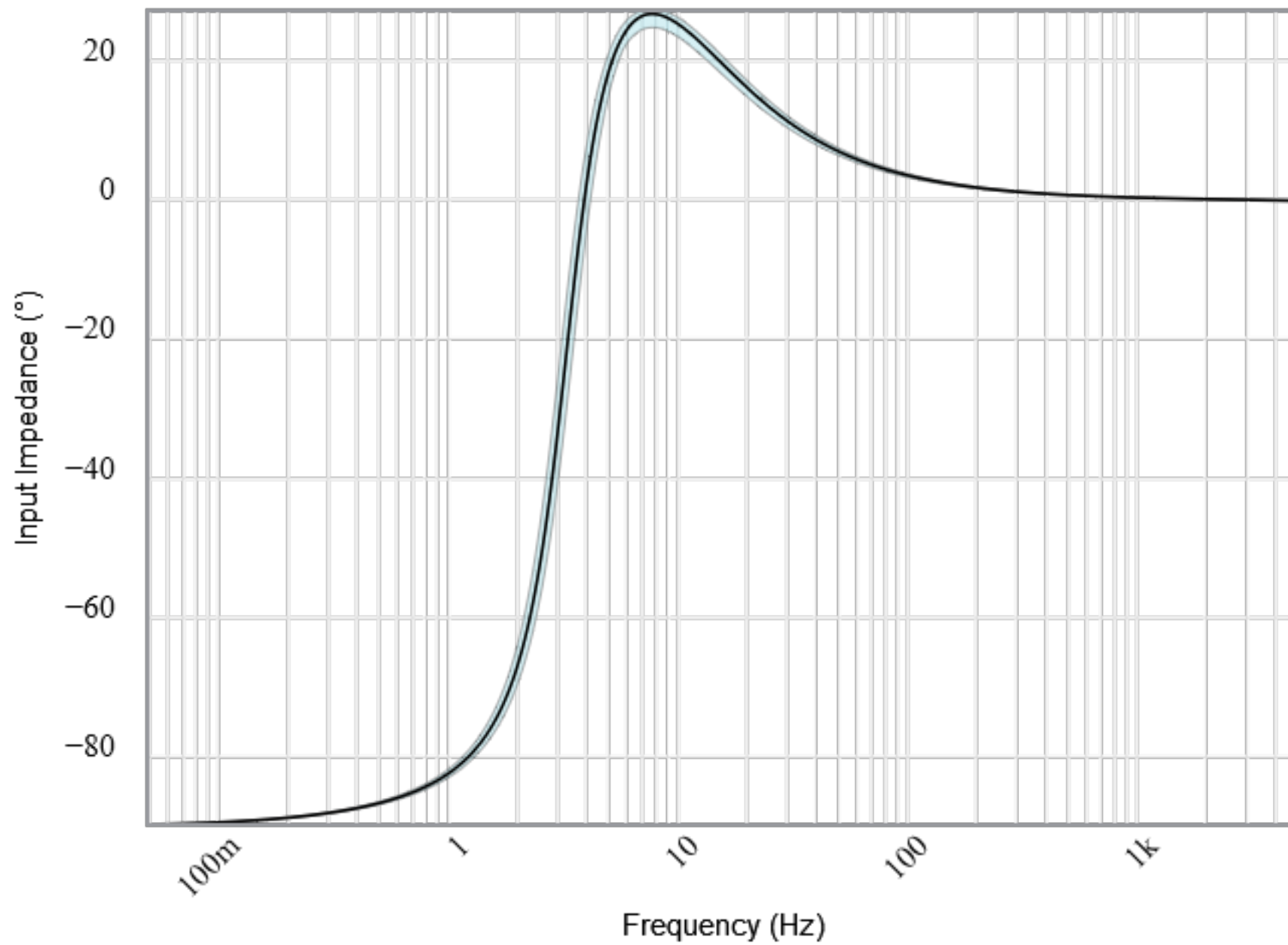
Step Response



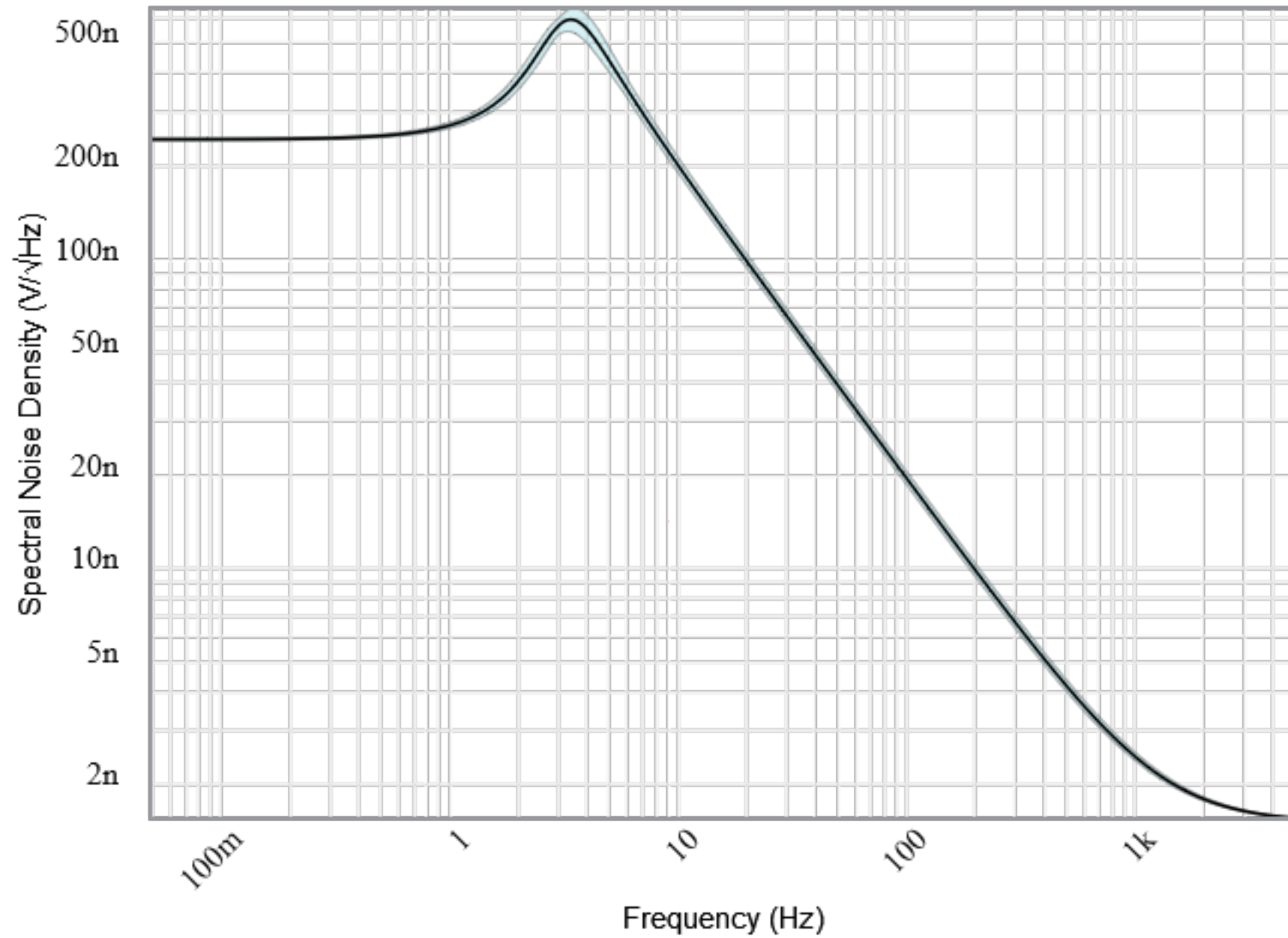
Input Impedance Magnitude



Input Impedance Phase



Noise



Stages

Your filter requires 2 op amp stage(s) with the following characteristics



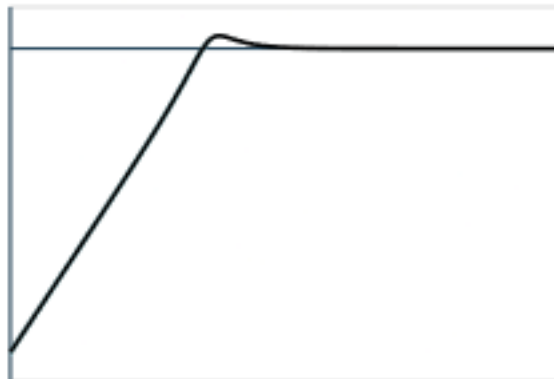
**2nd order
High-Pass
Sallen Key**

	Target	Simulated
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Gain (V/V):	1	1 to 1
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f_p (Hz):	3.13	3.11 to 3.51
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Q:	1.31	1.3 to 1.33
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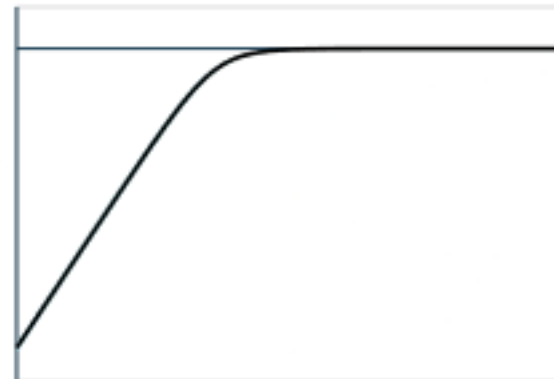
**2nd order
High-Pass
Sallen Key**

	Target	Simulated
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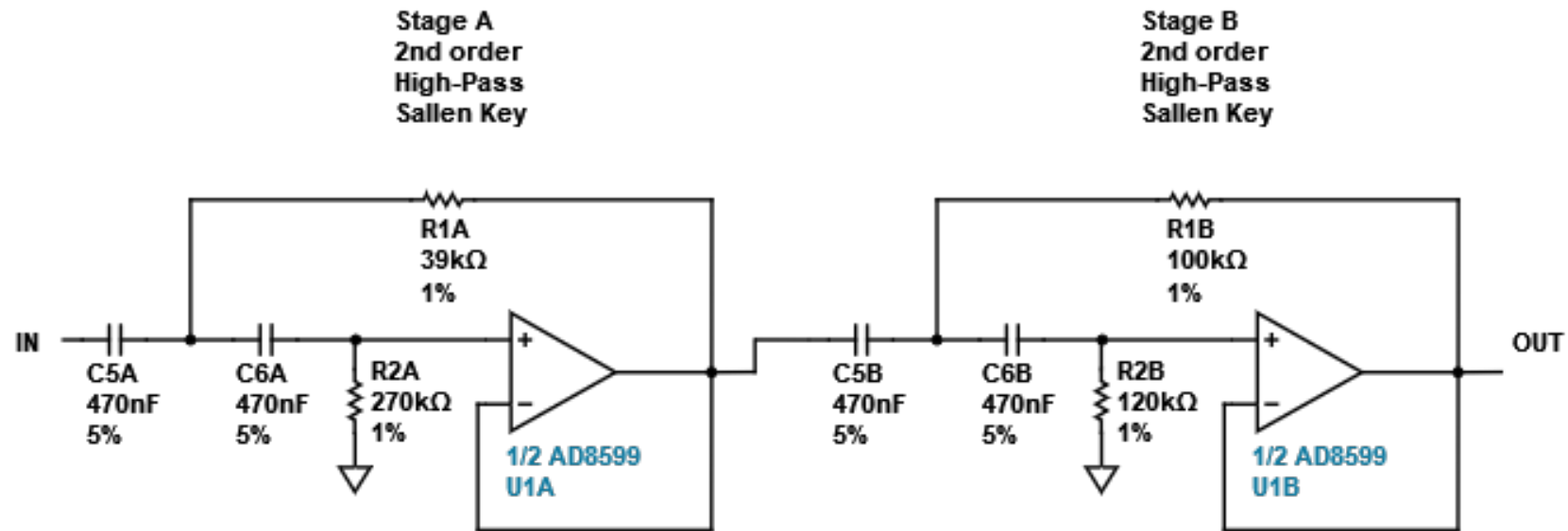
Gain (V/V):	1	1 to 1
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f_p (Hz):	3.13	2.92 to 3.29
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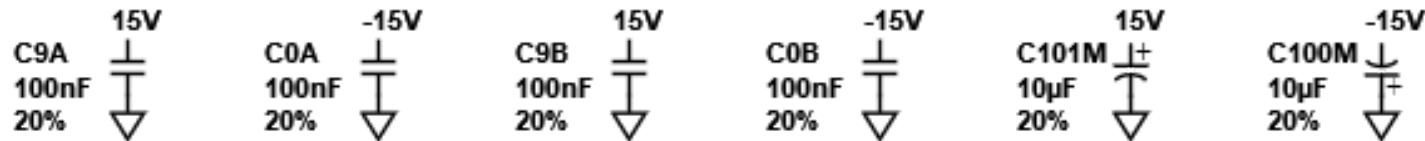
Q:	541m	541m to 553m
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Circuit



BYPASS CAPACITORS



SPARES Why The Spares?

