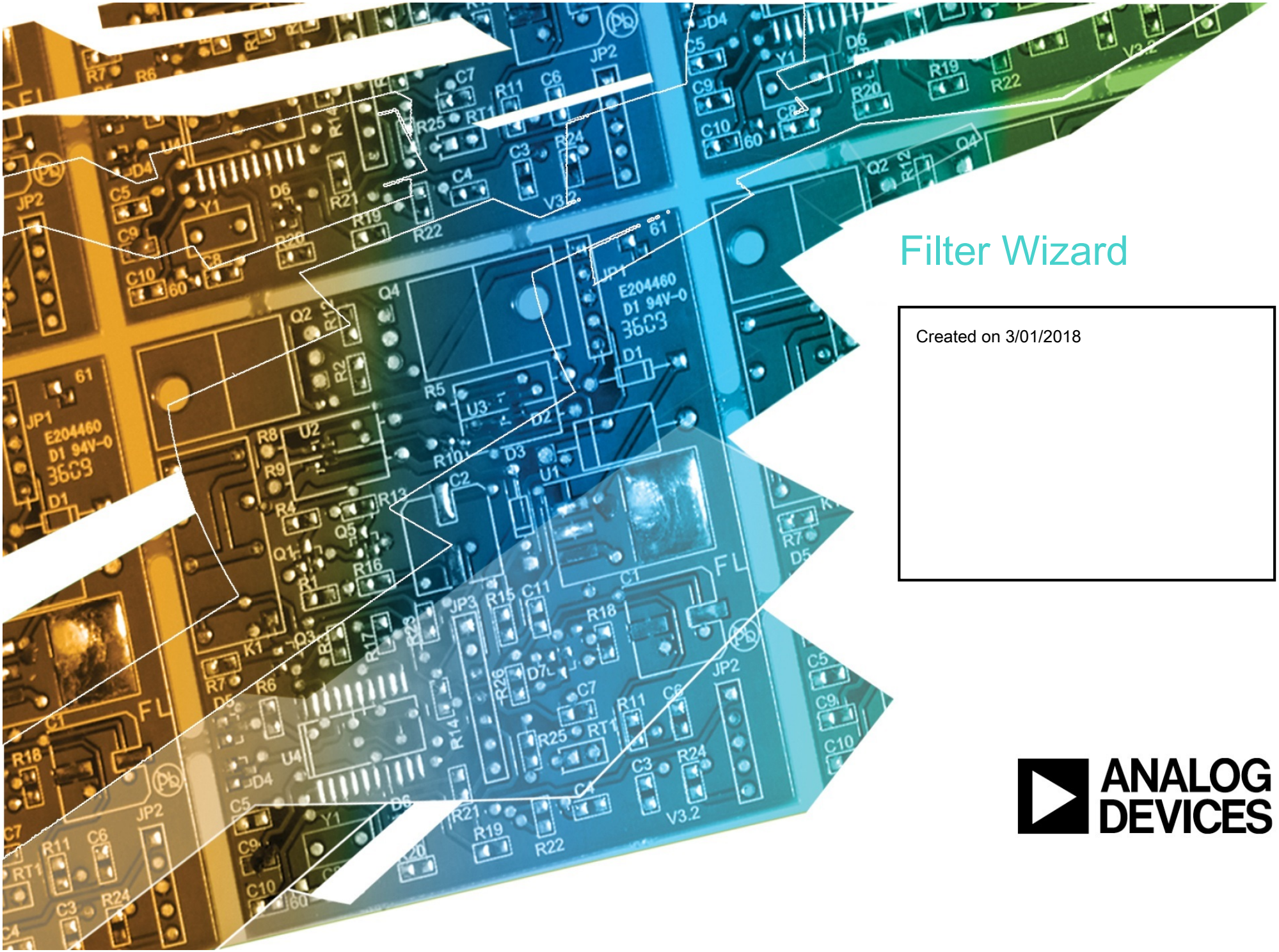


Filter Wizard

Created on 3/01/2018

ANALOG DEVICES

Filter Wizard Design Report

Filter Requirements for Low-Pass, 3rd order Butterworth Bessel 0.05

Specifications: Optimize for Specific Components, +Vs= 5, -Vs= -5

Gain: 0 dB

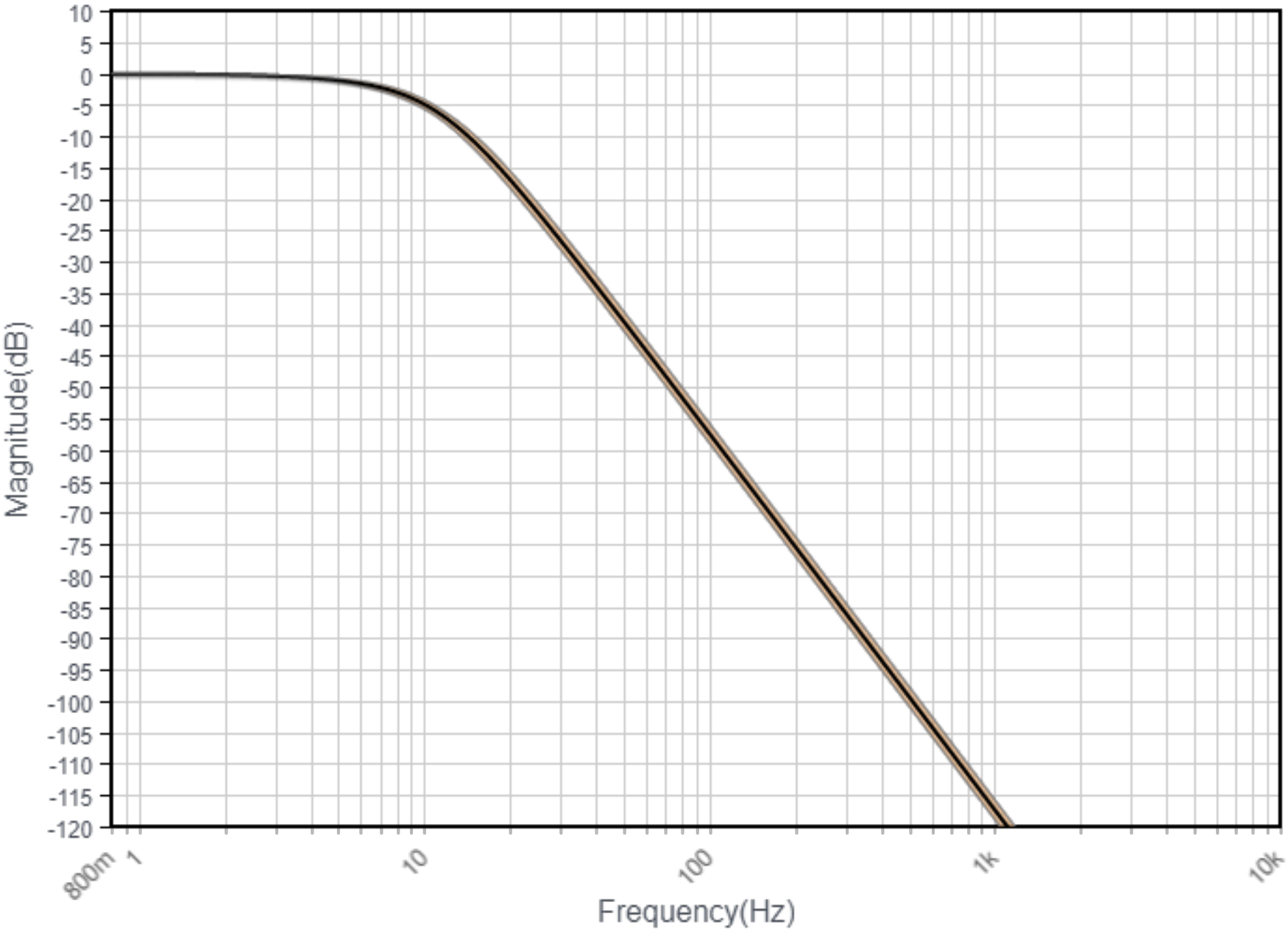
Passband: -3dB at 8Hz

Stopband: -100dB at 1kHz

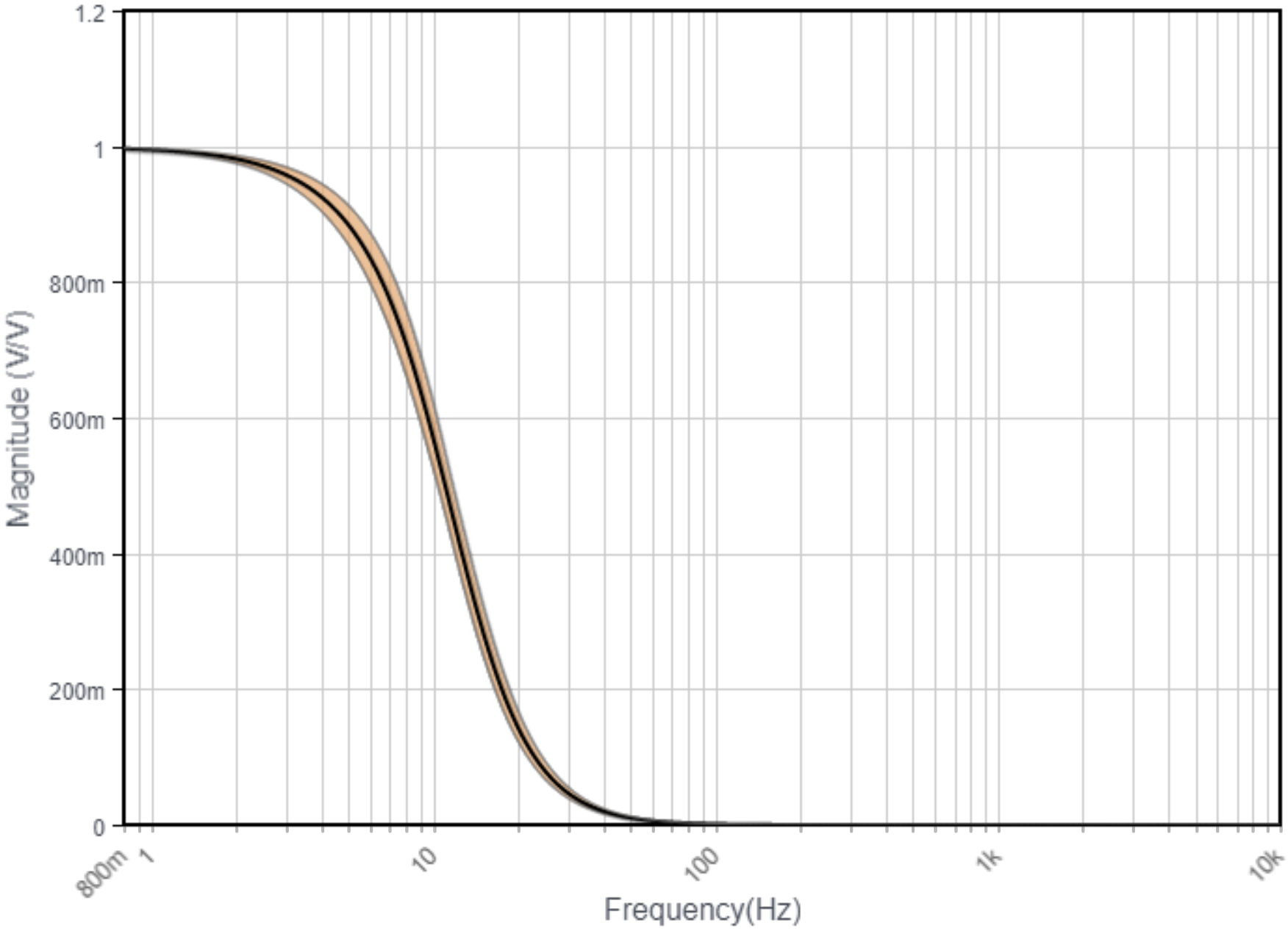
Component Tolerances: Capacitor = 5%; Resistor = 1%; Inductor = 5%; Op Amp GBW = 20%

BOM: refer to BOM.csv file

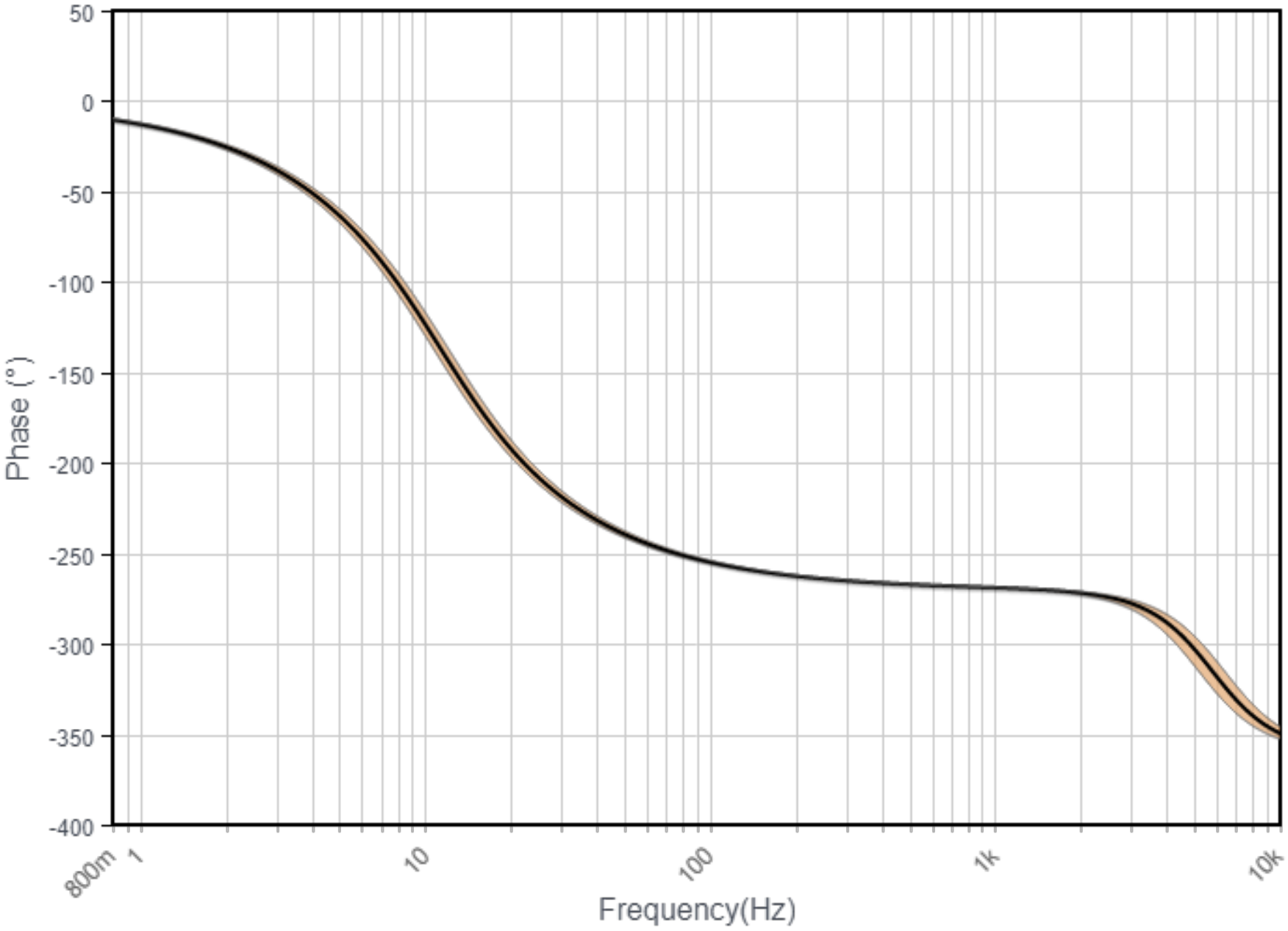
Magnitude(dB)



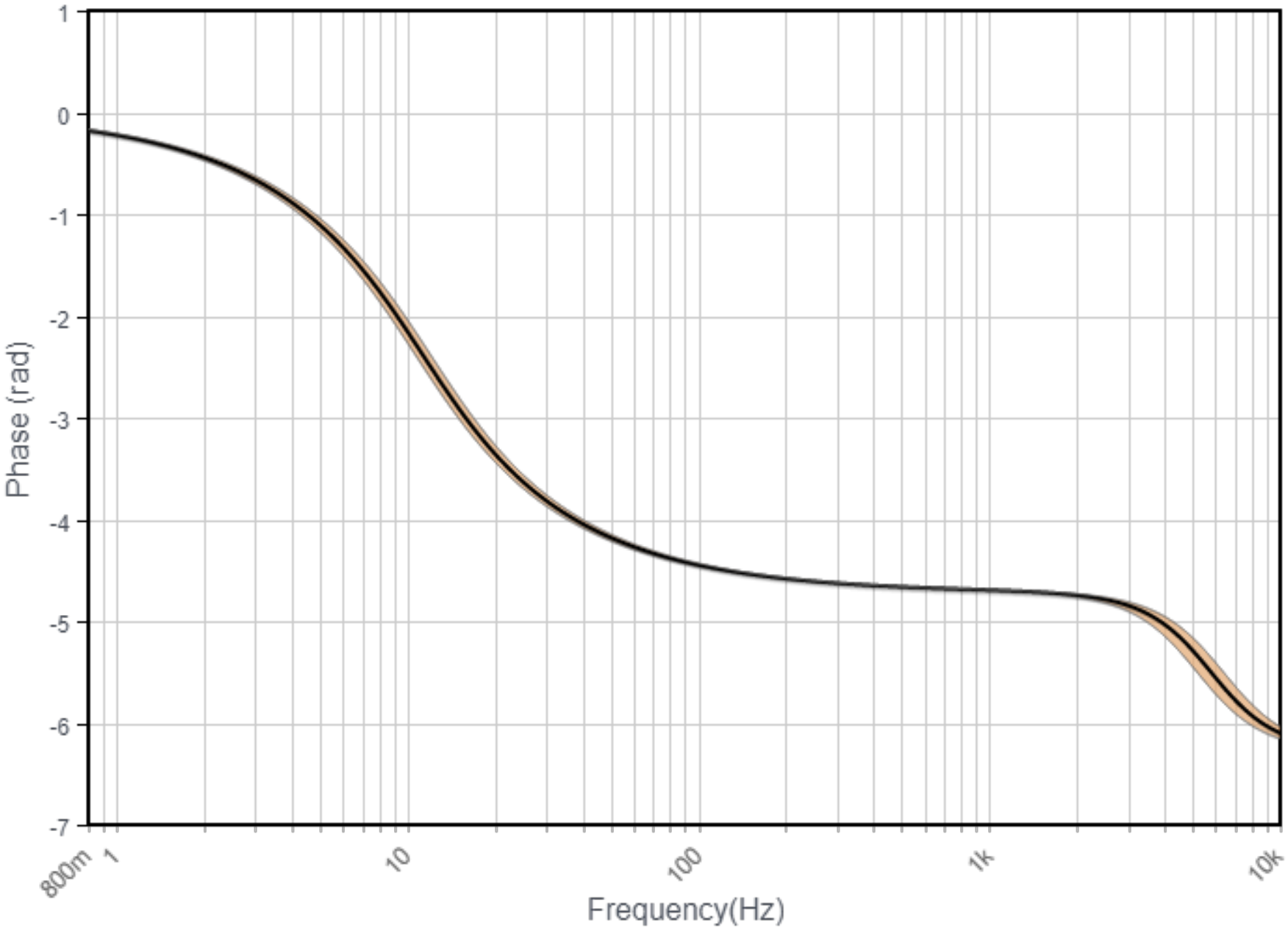
Magnitude(Volts per Volt)



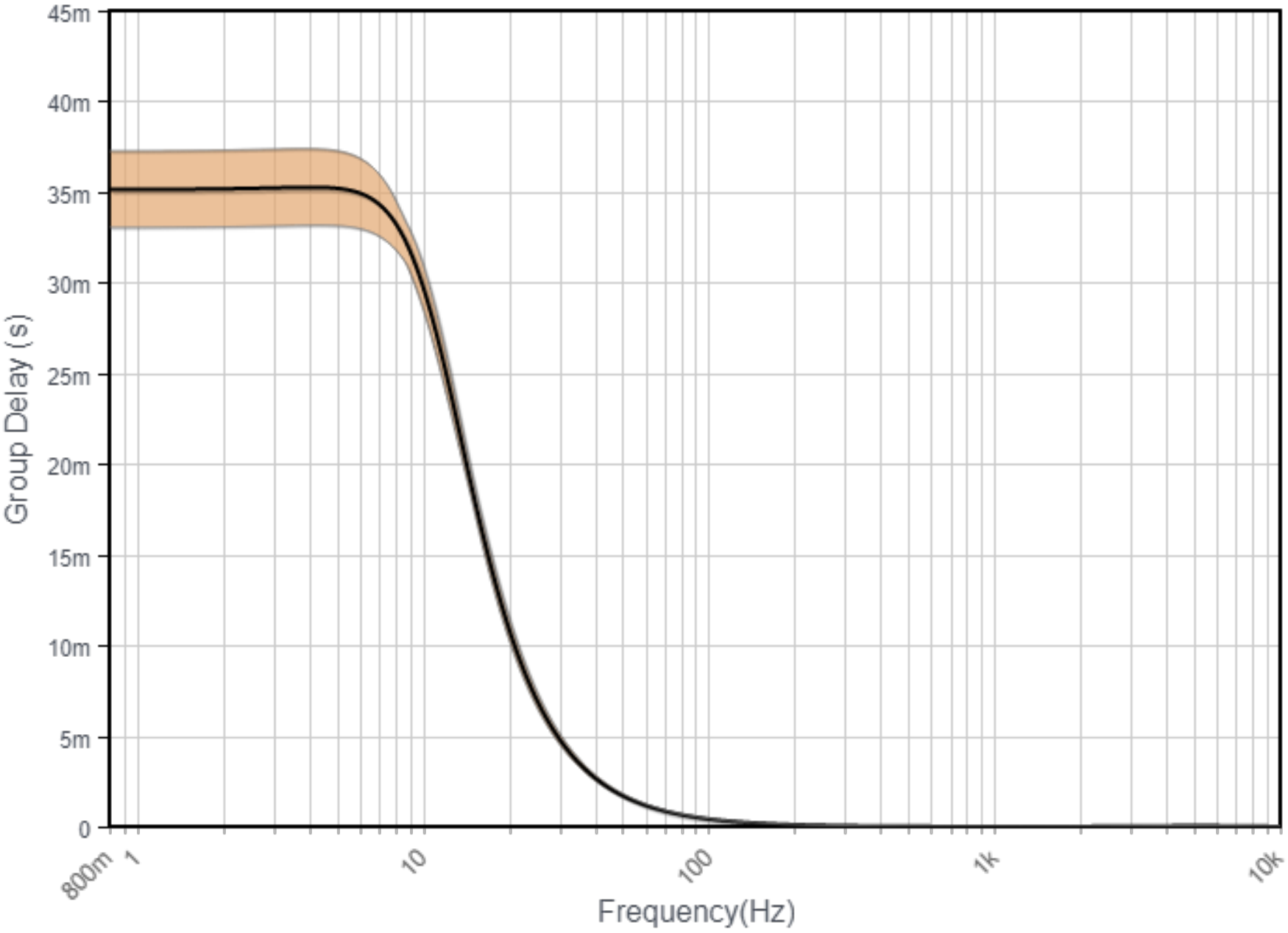
Phase(degrees)



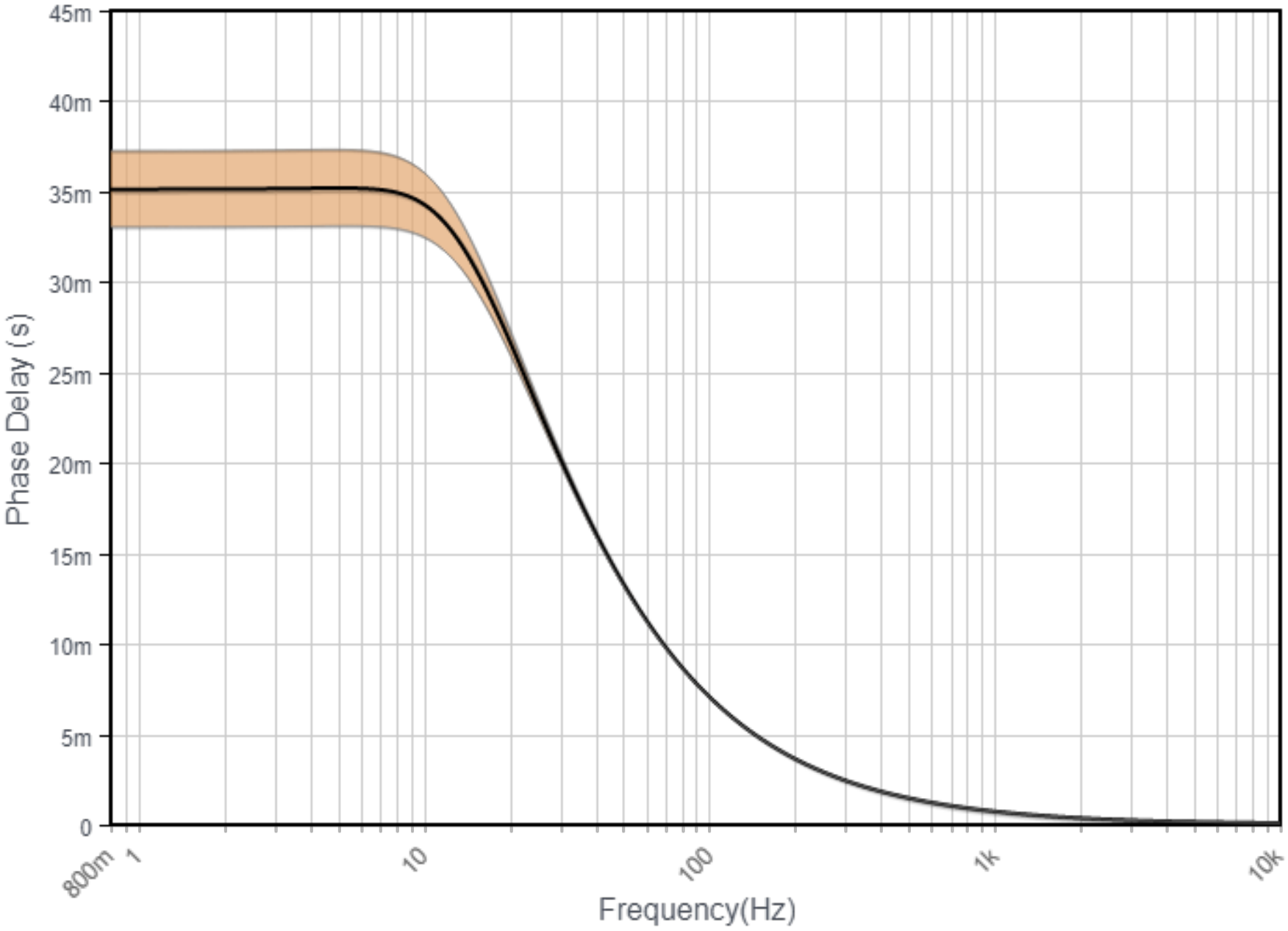
Phase(radians)



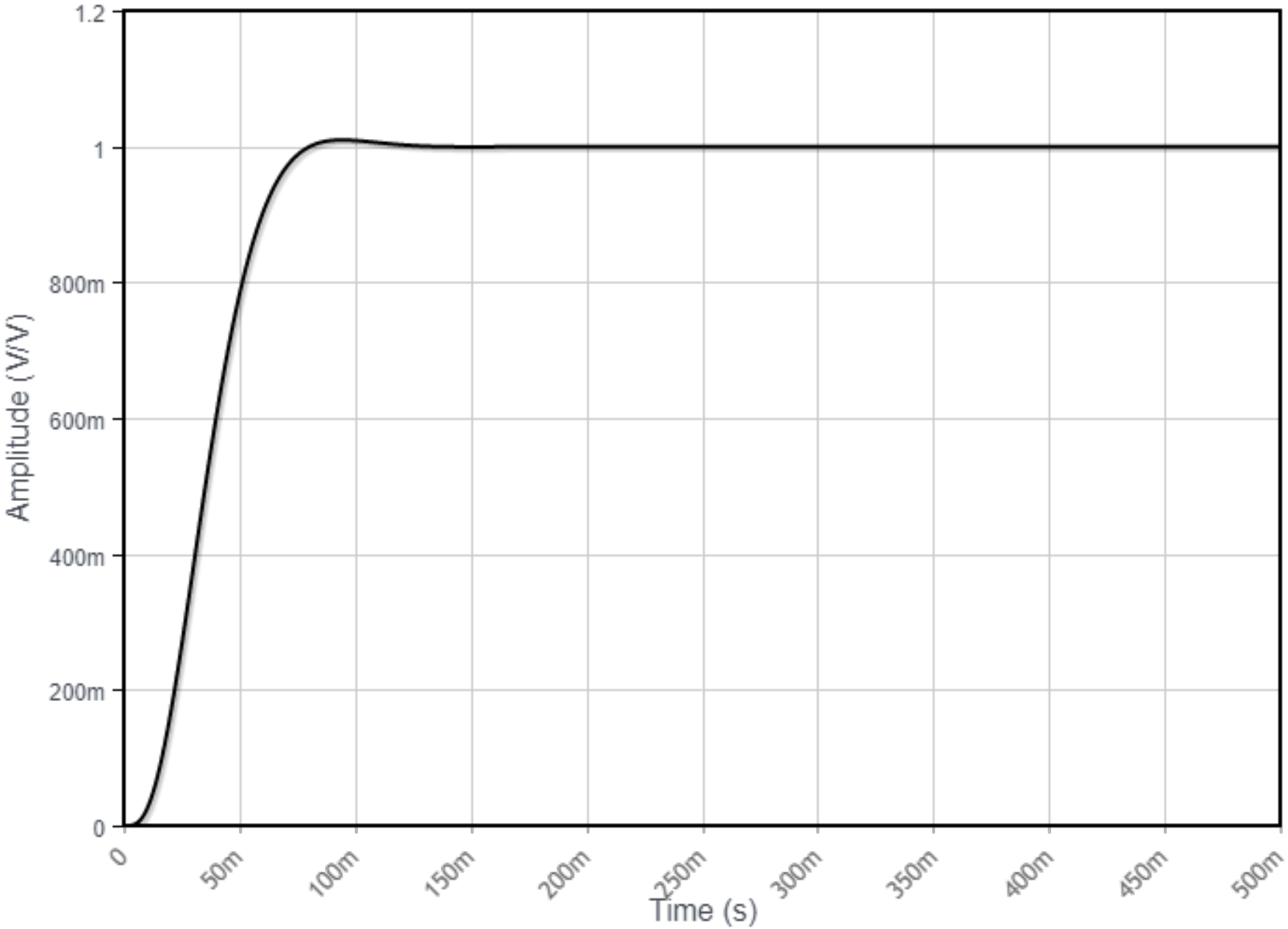
Group Delay


45m
40m
35m
30m
25m
20m
15m
10m
5m
0
Group Delay (s)
800m
1
10
100
1k
10k
Frequency(Hz)

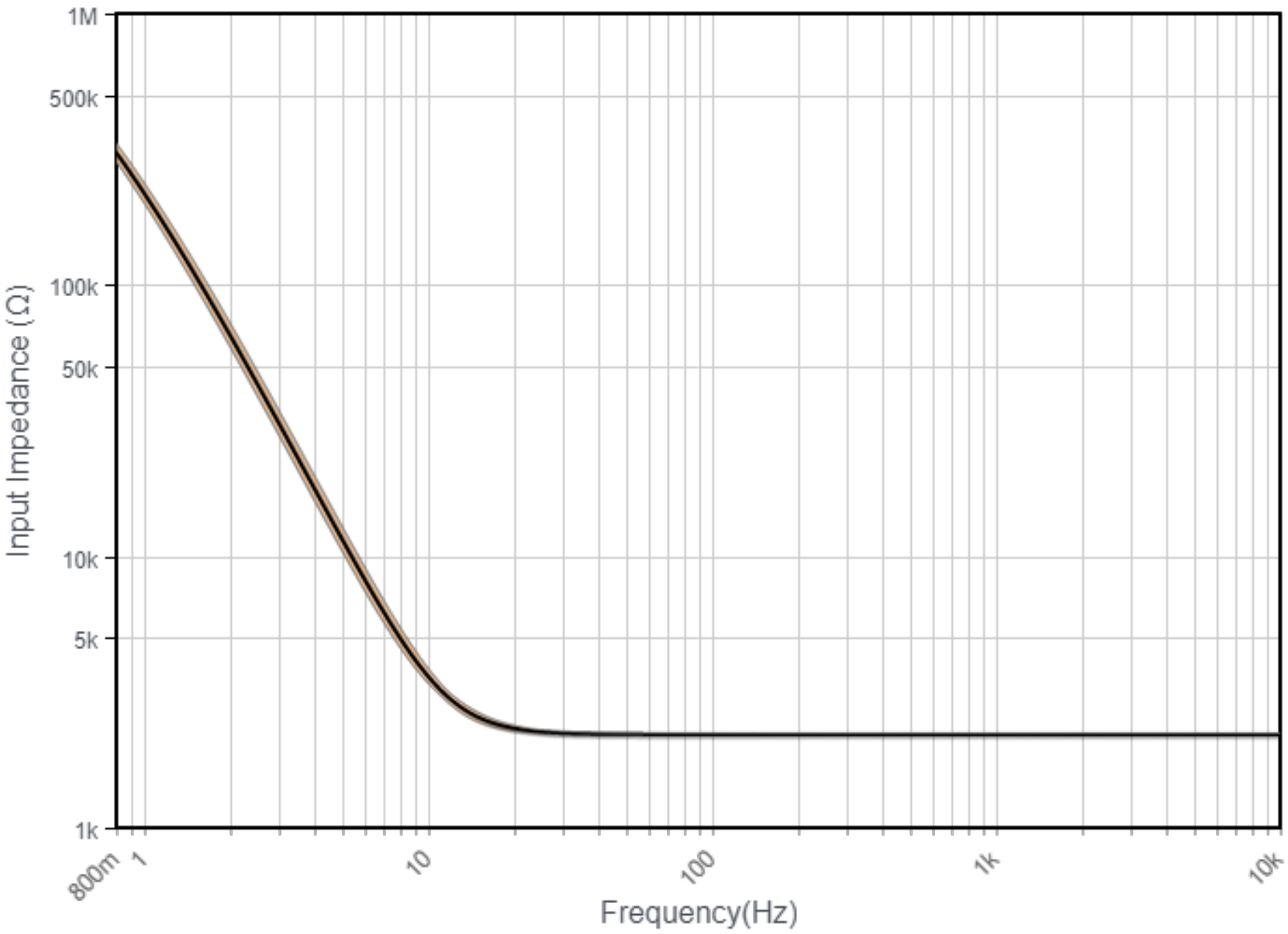
Phase Delay


45m
40m
35m
30m
25m
20m
15m
10m
5m
0
Phase Delay (s)
800m
1
10
100
1k
10k
Frequency(Hz)

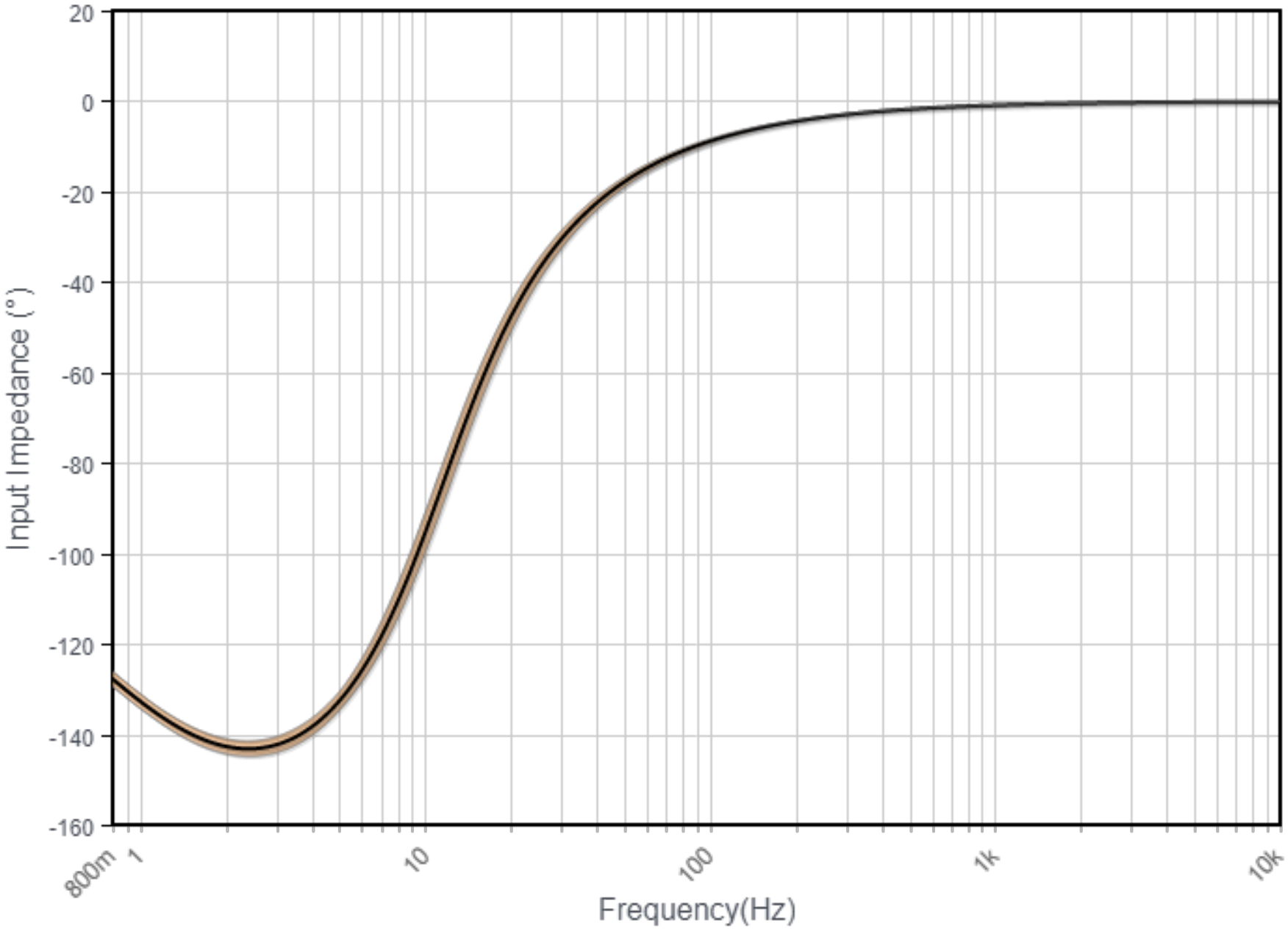
Step Response



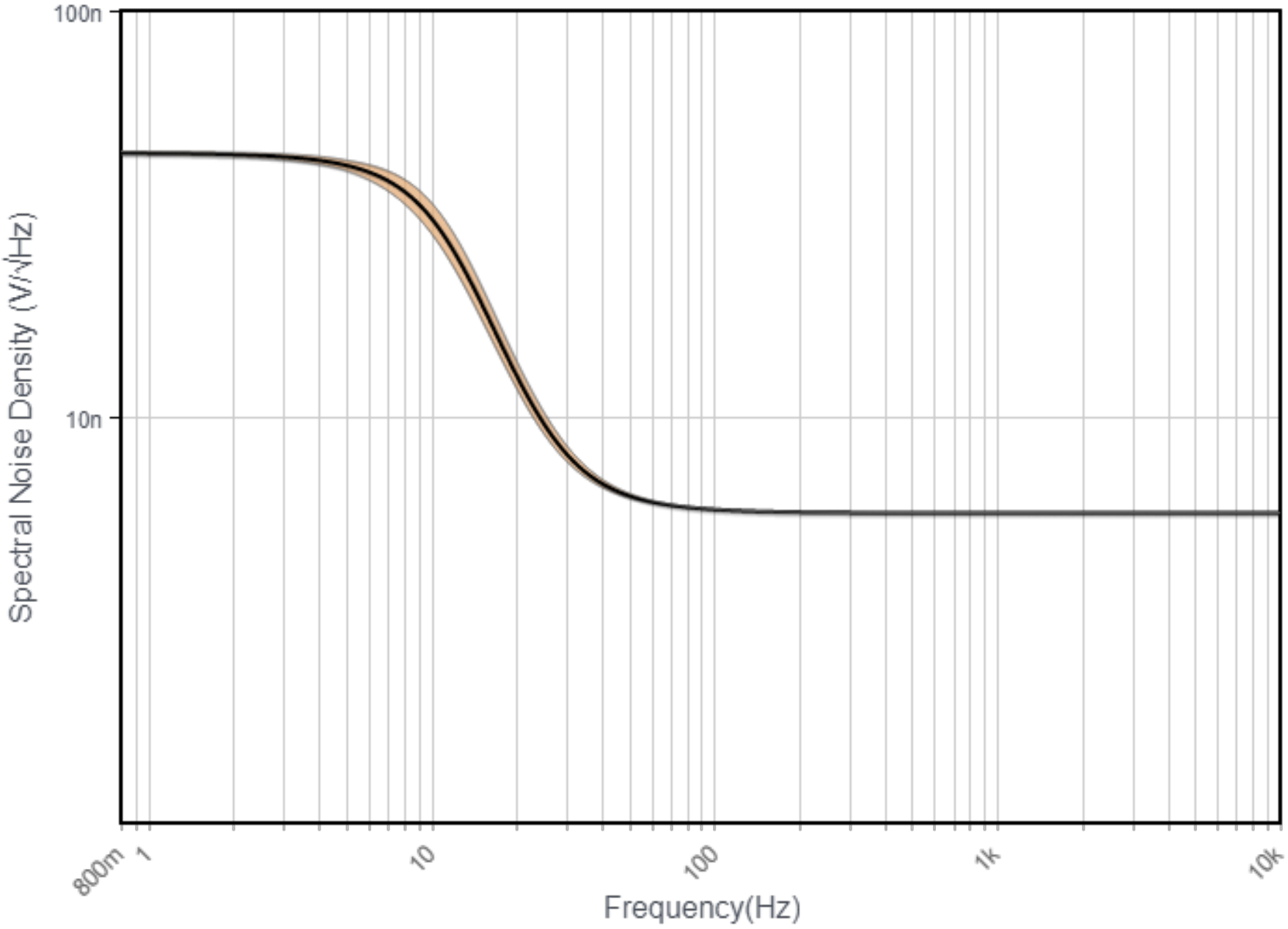
Input Impedance Magnitude



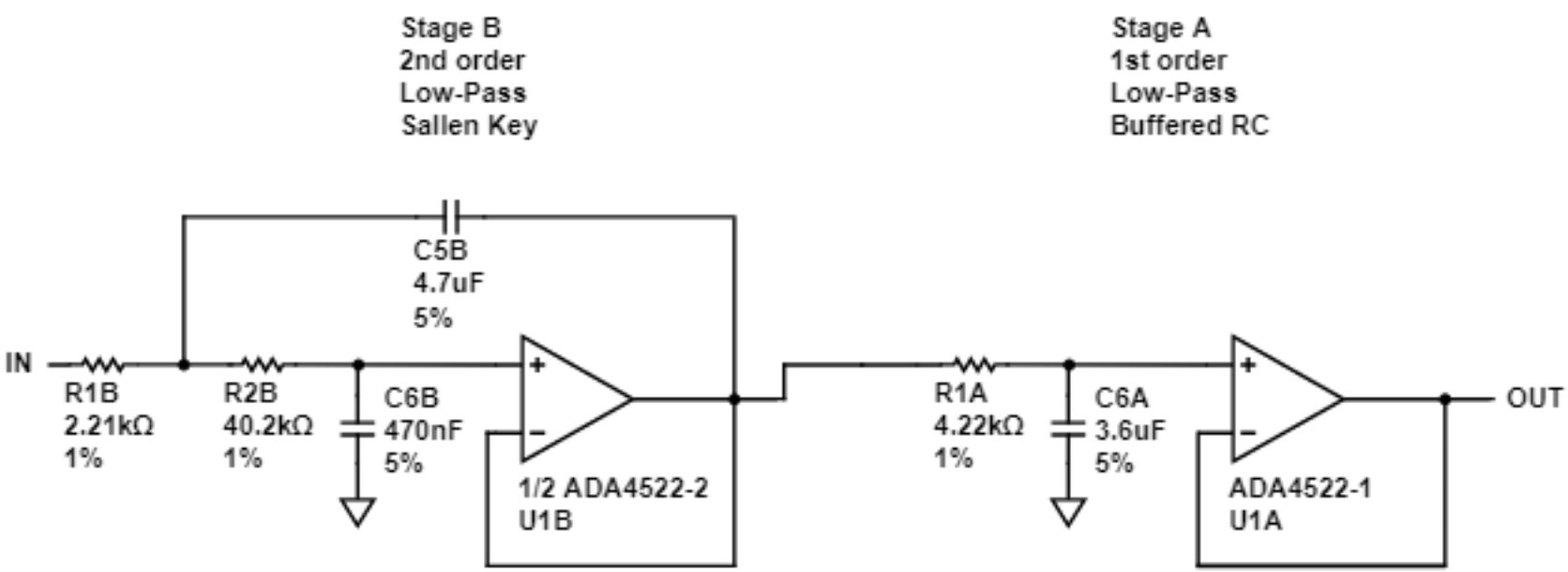
Input Impedance Phase

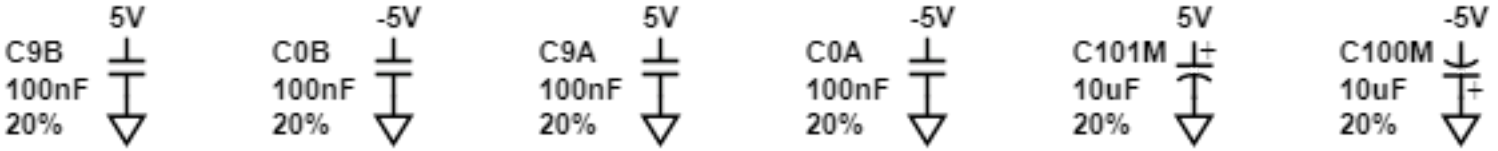


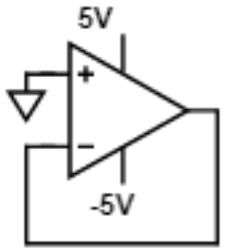
Noise


100n
10n
Spectral Noise Density (V/√Hz)
800m
1
10
100
1k
10k
Frequency(Hz)

Circuit







1/2 ADA4522-2
U1B