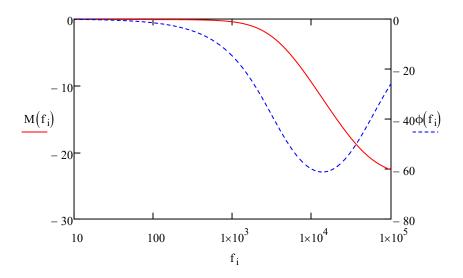
$$R1 := \, 43k\Omega \quad R2 := \, 3k\Omega \quad \quad C1 := \, 0.1 \mu F \quad \quad C2 := \, 1nF \quad \quad j \, := \, \sqrt{-1}$$

$$\overset{C}{\text{C}} := \frac{\text{C1} \cdot \text{C2}}{\text{C1} + \text{C2}} \quad \overset{R}{\text{R}} := \text{R1} + \text{R2} \quad \overset{K}{\text{K}} := \frac{\text{C}}{\text{C2}} \qquad \qquad \tau_z := \text{R2} \cdot \text{C2} \qquad \tau_p := \text{R} \cdot \text{C}$$

$$T(\mathbf{f}) := \mathbf{K} \cdot \frac{1 + (\mathbf{j} \cdot 2 \cdot \pi \cdot \mathbf{f}) \cdot \tau_{\mathbf{z}}}{1 + (\mathbf{j} \cdot 2 \cdot \pi \cdot \mathbf{f}) \cdot \tau_{\mathbf{p}}} \qquad \mathbf{f}_{\mathbf{p}} := \frac{1}{2\pi \cdot \tau_{\mathbf{z}}} = 5.305 \times 10^4 \frac{1}{\mathrm{s}} \qquad \mathbf{f}_{\mathbf{start}} := 10 \text{Hz} \qquad \qquad \mathbf{f}_{\mathbf{stop}} := 100 \text{kHz}$$

$$\underset{\text{MM:}}{\text{M:}} = 1024 \quad i := 0..\,N-1 \quad f_{\stackrel{\cdot}{i}} := f_{start} \cdot \left(\frac{f_{stop}}{f_{start}}\right)^{\frac{i}{N-1}} \quad M(f) := 20 \cdot \log\left(\left|T(f)\right|\right) \quad \varphi(f) := \frac{180}{\pi} \cdot \arg(T(f))$$





"\Client\C\$\Users\caleb 000\Documents\Y3S1\ECE3043\meimage.jpg"