

$$f_0 := 6.22\text{kHz} \quad j := \sqrt{-1} \quad \underline{\underline{C}} := 1\text{nF} \quad \underline{\underline{R}} := \frac{1}{2 \cdot \pi \cdot C \cdot f_0 \cdot \sqrt{6}} = 1.045 \times 10^4 \Omega \quad K_1 := 6 \quad K_2 := 5$$

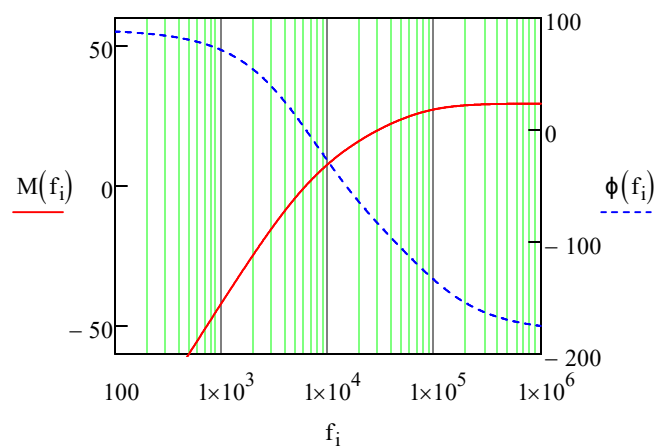
$$R_F := K_1 \cdot K_2 \cdot R = 3.134 \times 10^5 \Omega$$

$$\underline{\underline{K}} := \frac{-R_F}{R} = -30$$

$$\underline{\underline{T}}(f) := \underline{\underline{K}} \cdot \frac{(j \cdot 2 \cdot \pi \cdot f \cdot R \cdot C)^3}{(j \cdot 2 \cdot \pi \cdot f \cdot R \cdot C)^3 + K_1 \cdot (j \cdot 2 \cdot \pi \cdot f \cdot R \cdot C)^2 + K_2 \cdot (j \cdot 2 \cdot \pi \cdot f \cdot R \cdot C) + 1}$$

$$f_{\text{start}} := 100\text{Hz} \quad f_{\text{stop}} := 1000\text{kHz} \quad \underline{\underline{N}} := 1024 \quad i := 0..N-1$$

$$M(f) := 20 \cdot \log(|T(f)|) \quad \phi(f) := \frac{180}{\pi} \cdot \arg(T(f)) \quad f_i := f_{\text{start}} \cdot \left(\frac{f_{\text{stop}}}{f_{\text{start}}} \right)^{\frac{i}{N-1}}$$



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