$f_0 := 1000$

$\omega_0 := 2 \cdot \pi \cdot f_0$ $\omega := 2000., 2500 .. 400000$

$\tau := \frac{1}{\omega_0}$

$G(\omega) := \frac{(i \cdot \omega)}{i \cdot \omega - \frac{1}{\tau}}$

$\tau = 1.592 \cdot 10^{-4}$

$G_{dB}(\omega) := 20 \cdot \log(|G(\omega)|)$

$G_{dB}(1000) = -16.072$

$f(\omega) := 20 \cdot (\Phi(\omega - \omega_0)) \cdot \log(1) + \Phi(\omega_0 - \omega) \cdot 20 \cdot \log(\omega \cdot \tau)$