

Low Pass LC Filter

$$j := \sqrt{-1}$$

$\sigma := 0$ Damping Factor <0=damped ringing >0 ringing increases

$$i := 1 \dots 30 \cdot 10^2$$

$$f_i := i \cdot 100\text{Hz} \quad \text{use 100Hz steps}$$

$$\omega_i := 2 \cdot \pi \cdot f_i$$

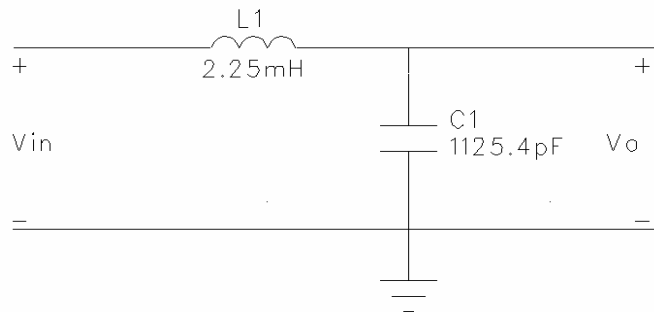
$$s_i := \sigma + j \cdot \omega_i$$

$$r := 500 \dots 2000$$

$$R_r := r \cdot 1\Omega$$

$$L := 2.25 \cdot 10^{-3} \text{H}$$

$$C := 1125.4 \cdot 10^{-12} \text{F}$$



$$H_{(i,r)} := \frac{1}{1 - (\omega_i)^2 \cdot L \cdot C + s_i \cdot \frac{L}{R_r}}$$

