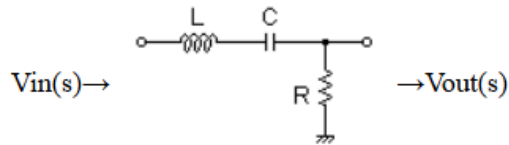


RLC Filter



Transfer Function:

$$G(s) = \frac{26595.744680851s}{s^2 + 26595.744680851s + 141843971.63121}$$

Center passes frequency

$$f_0 = 1895.5077880481[\text{Hz}]$$

Quality factor

$$Q = 0.44780948329991$$

Damping ratio

$$\zeta = 1.1165462515789$$

Pole(s)

$$\begin{aligned} p &= -1174.9908664843[\text{Hz}] \\ |p| &= 1174.9908664843[\text{Hz}] \\ p &= -3057.8533646831[\text{Hz}] \\ |p| &= 3057.8533646831[\text{Hz}] \end{aligned}$$

Zero(s)

$$\begin{aligned} z &= 0[\text{Hz}] \\ |z| &= 0[\text{Hz}] \end{aligned}$$

R= 125 Ω

L= 4.7m H

C= 1.5u F

p:pico, n:nano, u:micro, k:kilo, M:mega

Frequency analysis

- ☒ Bode diagram
 - ☒ Phase ☐ Group delay
- ☒ Nyquist diagram
- ☒ Pole, zero
- ☒ Phase margin
- ☒ Oscillation analysis

Analysis on frequency range:

f1= [] ~ f2= [] [Hz] (optional)

Transient analysis

- ☒ Step response
- ☐ Impulse response
- ☒ Overshoot
- ☒ Final value of the step response

Analysis on time range:

0~ [] [sec] (optional)

Calculate