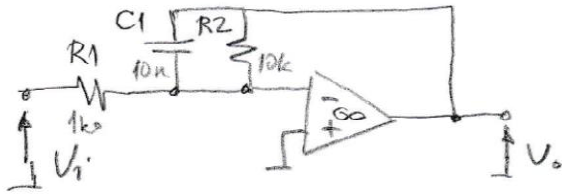


AE-2020129

①



$$V_- \left(\frac{1}{R_1} + \frac{1}{R_2} + j\omega C_1 \right) - V_i \frac{1}{R_1} - V_o \left(\frac{1}{R_2} + j\omega C_1 \right) = 0$$

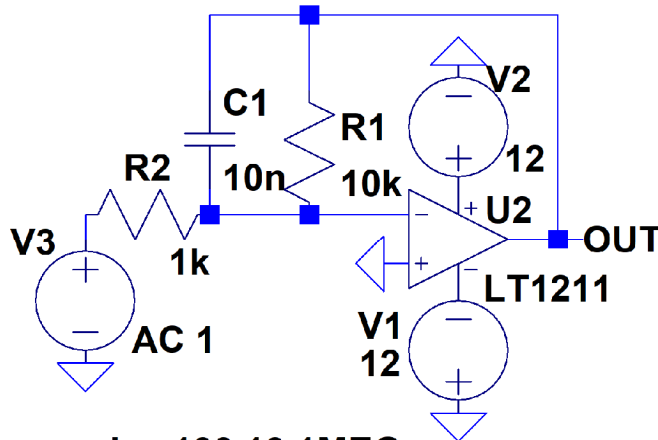
$$\frac{V_o}{V_i} = - \frac{1/R_1}{\frac{1}{R_2} + j\omega C_1} = - \frac{R_2}{R_1} \frac{1}{1 + j\omega C_1 R_2}$$

$$A(j\omega) = A_o \cdot \frac{1}{1 + j \frac{\omega}{\omega_H}} ; A_o = - \frac{R_2}{R_1} ; \omega_H = \frac{1}{C_1 R_2} ;$$

$$A_o = - \frac{10k}{1k} = -10 ; \omega_H = \frac{1}{10n \cdot 10k} = \frac{1}{100\mu} = 10^4 \frac{\text{rad}}{\text{s}}$$

$$f_H = \frac{\omega_H}{2\pi} = 1591 \text{ Hz}$$

2.



.ac dec 100 10 1MEG

