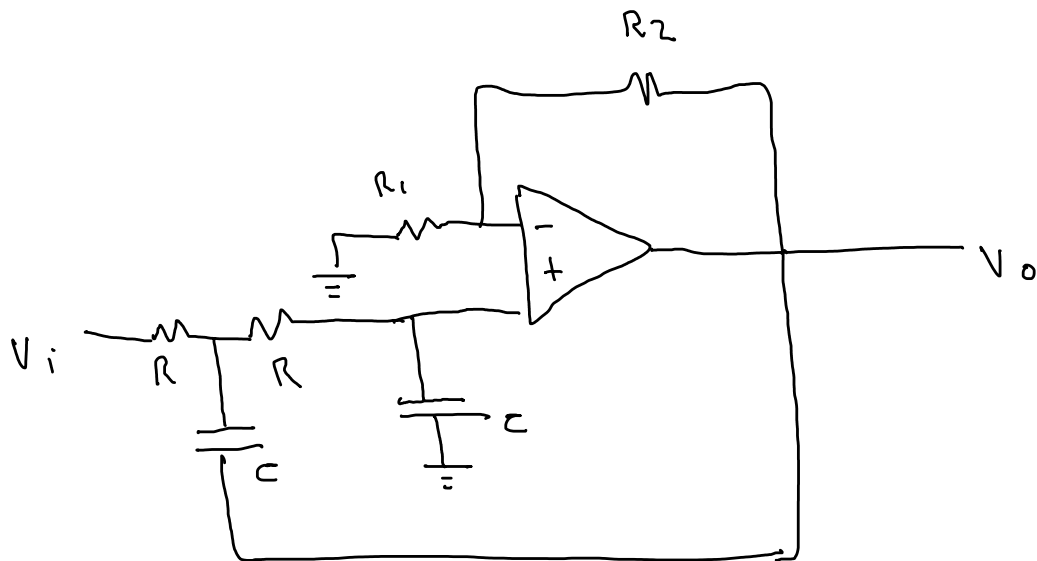


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2CM18

Tarea 2.8 Filtro Pasa Bajas y pasa altas de 2° orden



$$f_c = \frac{1}{2\pi R C}$$

1. $f_c = 7.5 \text{ kHz}$

$$R = 1 \text{ k}\Omega$$

$$f_c = \frac{1}{2\pi R C}$$

$$C = \frac{1}{2\pi R f_c} = \frac{1}{2\pi \times 1 \times 10^3 \times 7.5 \times 10^3}$$

$$C = \frac{6.67 \times 10^{-8}}{\pi} \text{ F}$$

$$C = 2.1231 \times 10^{-8} \text{ F}$$

$$R = 1 \text{ k}\Omega$$

2. $f_c = 800 \text{ Hz}$

$$R = 100$$

$$C = \frac{1}{2\pi R f_c} = \frac{1}{2\pi \times 100 \times 800}$$

$$C = \frac{6.25}{\pi} \text{ nF}$$

$$C = 1.9894 \text{ nF}$$

$$R = 100 \Omega$$