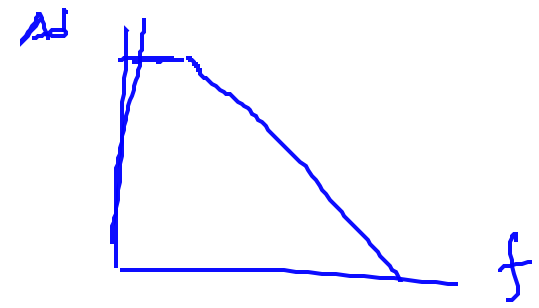


Identificação



$$\omega_0 = \sqrt{\frac{R_1 + R_2}{R_1 R_2 R_5 C_3 C_4}}$$

$$2j \left\{ \frac{j\omega}{\omega_0} = j \frac{R_1 R_2}{R_1 + R_2} (C_3 + C_4) \right\} \Rightarrow \left\{ = \frac{C_3 + C_4}{2} \frac{\sqrt{R_1 R_2}}{\sqrt{R_1 + R_2}} \sqrt{\frac{R_1 + R_2}{R_1 R_2 R_5 C_3 C_4}} \right.$$

$$\left. \right\} = \frac{C_3 + C_4}{2} \sqrt{\frac{R_1 R_2}{R_5 C_3 C_4 (R_1 + R_2)}}$$

$$A = \frac{-R_2 R_5}{R_1 + R_2} C_3 \left( \frac{1}{2} \right) \frac{1}{\zeta} \omega_0 = \frac{-R_2 R_5}{R_1 + R_2} C_3 \frac{1}{2} \frac{2}{C_3 + C_4} \sqrt{\frac{R_5 C_3 C_4 (R_1 + R_2)}{R_1 R_2}}$$

$$A = \frac{R_5 C_3}{R_1 (C_3 + C_4)}$$

Natureza do filtro

Passa banda.

c) A; ζ; ω<sub>0</sub>.

$$A = -11$$

$$\omega_0 = 9680 \text{ rad/s} \rightarrow f_0 = 1,54 \text{ kHz}$$

$$\zeta = 0,047$$