

Implementación



$$T(s) = \frac{5 \frac{6}{C}}{s^2 + \frac{6}{C}s + \frac{1}{LC}}$$

$$B = \frac{W_0}{Q} = \frac{1}{RL}$$

$$W_0^2 = \frac{1}{LC}$$

BP1

- $R = 1 \Omega \Rightarrow \frac{1}{C \cdot 1} = 0,125 \Rightarrow C = 8 F$
- $W_0 = 1$
- $Q = 8$

$$\frac{1}{L \cdot 8} = 1 \Rightarrow L = 0,125 H$$

BP2

- $R = 1 \Omega \Rightarrow \frac{1}{C} = 0,056 \Rightarrow C = 17,86 F$
- $W_0 = 0,9$
- $Q = 16,074$

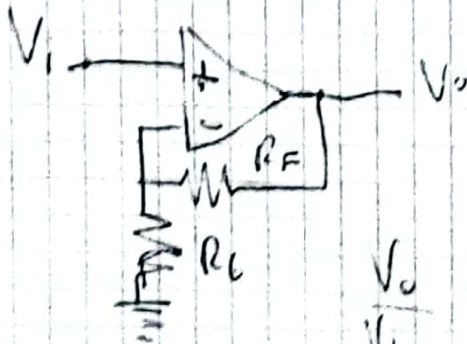
$$\frac{1}{17,86 L} = 0,815 \Rightarrow L = 0,0687 H$$

BP3

- $R = 1 \Rightarrow \frac{1}{C} = 0,07 \Rightarrow C = 14,29 F$
- $W_0 = 1,1$
- $Q = 15,9$

$$\frac{1}{14,29 L} = 1,226 \Rightarrow L = 0,057 H$$

ganancia - Implementación



$$\frac{V_o}{V_i} = 1 + \frac{R_F}{R_G}$$

$$G = \frac{11,71}{1,77} = 6,61$$

$$R_F = 10,71 \quad R_G = 1$$