

PUNTO 4)

Ya tengo la norma de frecuencia $\omega_p = 2\pi \cdot 1500$

Si dispongo de capacitores de 100 nF , puedo determinar que norma de impedancia.

$$C = C' \cdot \frac{1}{R_w \cdot \Omega_z} \quad \Omega_w = 2\pi \cdot 1500 \quad \text{y} \quad C = 100\text{ nF}$$

$$\Omega_z = \left(\frac{C \cdot \Omega_w}{C'} \right) \Rightarrow \Omega_z = \frac{C'}{C \cdot \Omega_w} \Rightarrow \Omega_z = \frac{0,03}{100\text{ nF} \cdot 2\pi \cdot 1500}$$

$$\boxed{\Omega_z = 668,45} \quad (*VC: \text{valor comercial})$$

$$R_1 = R'_1, \Omega_z = 1 \cdot 668,45 \Rightarrow \boxed{R_1 = 668,45 \Omega} \quad (VC: 680 \Omega)$$

$$R_2 = R'_2 \cdot \Omega_z = 1,26 \cdot 668,45 \Rightarrow \boxed{R_2 = 842,25 \Omega} \quad (VC: 820 \Omega)$$

$$C_1 = C'_1 \cdot \frac{1}{R_w \cdot \Omega_z} \Rightarrow \boxed{C_1 = 100\text{ nF}} \quad (VC: 100\text{ nF})$$

$$\boxed{C_2 = 100\text{ nF}} \quad (VC: 100\text{ nF})$$

$$L = \frac{L' \cdot \Omega_z}{\Omega_w} = \frac{1 \cdot 668,45}{2\pi \cdot 1500} \Rightarrow \boxed{L = 70,92\text{ mH}} \quad (VC: 70\text{ mH})$$

