

# *Circuito CA*

## *Potencia en circuitos de CA*

*Aparente*

$$S = P \pm jQ$$

*Real*

$$P = iV \cos \varphi$$

*Reactiva*

$$Q = iV \sin \varphi$$

*Factor de Potencia*

$$fr = \frac{1}{2\pi\sqrt{LC}}$$

## *Reactancias*

*Inductiva*

$$X_L = 2\pi fL$$

*Capacitiva*

$$X_c = \frac{1}{2\pi fL}$$

*Impedancia*

$$Z = \sqrt{R^2 + (X_L - X_c)^2}$$

$$\tan \varphi = \frac{X_L - X_c}{R}$$

*Voltaje Total en un circuito RLC*

$$V\tau = \sqrt{V_R^2 + (V_L - V_c)^2}$$

$$\tan \varphi = \frac{V_L - V_c}{V_r}$$