

Circuito CA

Potencia en circuitos de CA

Reactancias

Aparente

$$S = P \pm jQ$$

Inductiva

$$X_L = 2\pi fL$$

Real

$$P = iV \cos \varphi$$

Capacitiva

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

Reactiva

$$Q = iV \sin \varphi$$

Impedancia

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

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

Factor de Potencia

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

Voltaje Total en un circuito RLC

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

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

