

Effective value

$$u = \frac{\hat{u}}{\sqrt{2}}$$

Impedance of Coil

$$Z_L = \omega \cdot L$$

Capacitor impedance

$$Z_C = \frac{1}{\omega C}$$

Total impedance

$$Z = \sqrt{|Z_L - Z_C|^2 + R^2}$$

$$Z = \frac{u}{i}$$

Resonance

$$f_{res} = \frac{1}{2\pi\sqrt{LC}}$$