

**Fórmulas útiles**

$$v_L = L \frac{di_L}{dt} \quad i_C = C \frac{dv_C}{dt} \quad \omega_0 = \frac{1}{\sqrt{LC}}$$

$$\text{RLC Serie} \quad \alpha = \frac{R}{2L}$$

$$\text{RLC Paralelo} \quad \alpha = \frac{1}{2RC}$$

$$\text{Ecuación característica} \quad s^2 + 2\alpha s + \omega_0^2 = 0$$

$$\omega_r = \sqrt{\omega_0^2 - \alpha^2}$$

$$f(t) = f_F + A_1 e^{s_1 t} + A_2 e^{s_2 t}$$

$$f(t) = f_F + (A_1 + A_2 t) e^{-s_1 t}$$

$$f(t) = f_F + (A_1 \cos \omega_r t + A_2 \sin \omega_r t) e^{-\alpha t}$$