

Resonance

EGR

November 16, 2020

Tacoma Bridge

Features

Tacoma bridge and Swings....

- Tacoma Bridge
- Tacoma Bridge eng

Formules

$$Z_C = 1/i\omega C$$

$$Z_L = i\omega L$$

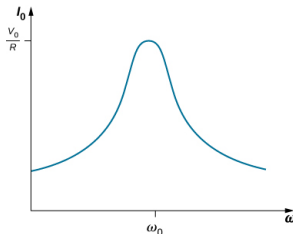
$$\text{Circuit LC parallele : } Z = Z_L Z_C / (Z_L + Z_C)$$

$$Z = L/C / ((1 - \omega^2 LC) / i\omega C)$$

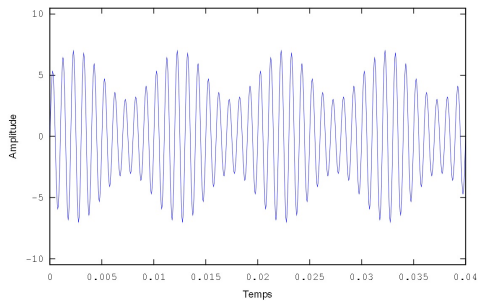
$$Z = i\omega L / (1 - \omega^2 LC)$$

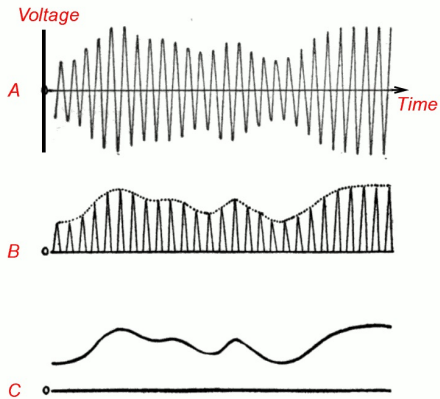
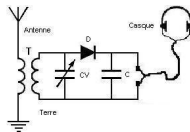
$$\omega_{\text{resonance}} = 1/\sqrt{LC}$$

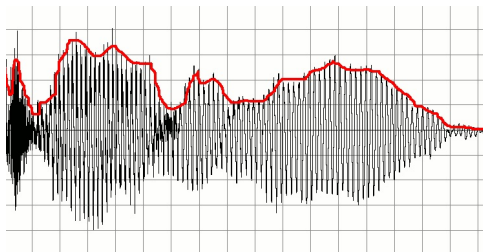
$$2\pi f = \omega$$



- Rappel: AM







- $\lambda = f/c$



