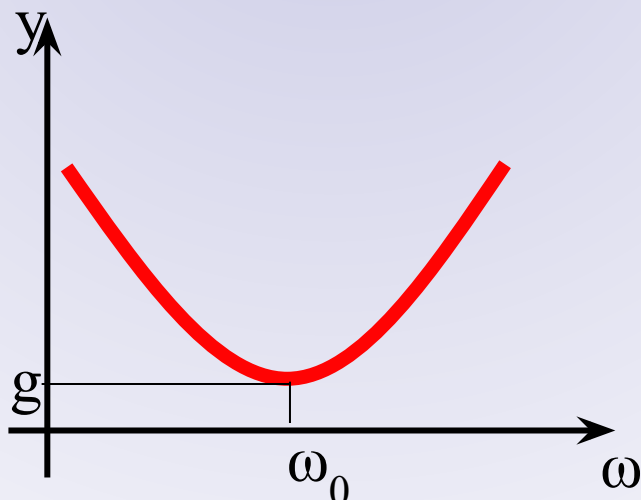
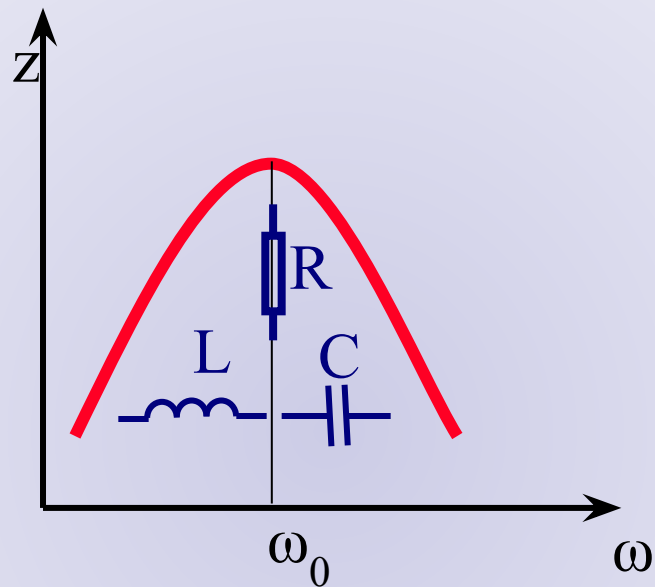


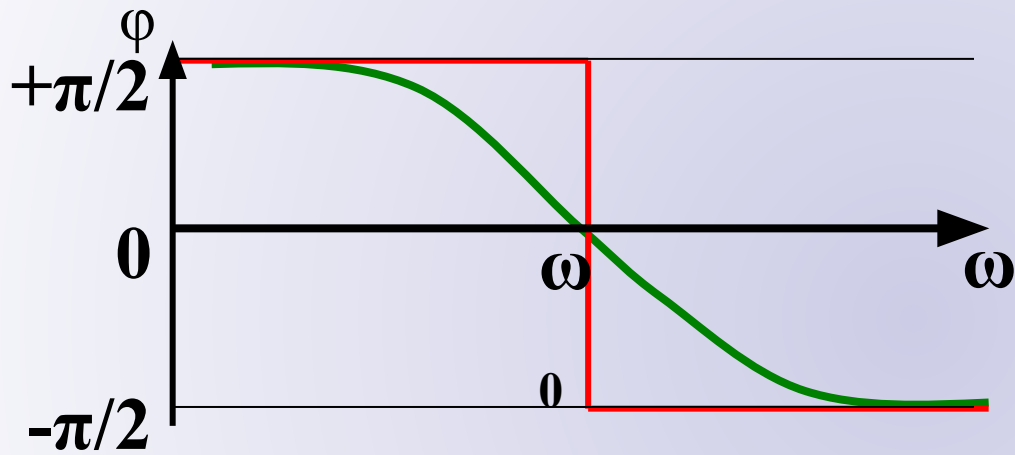
Резонанс токов в электрических цепях

Частотные характеристики

1) Зависимость входного сопротивления от частоты



2) ФЧХ

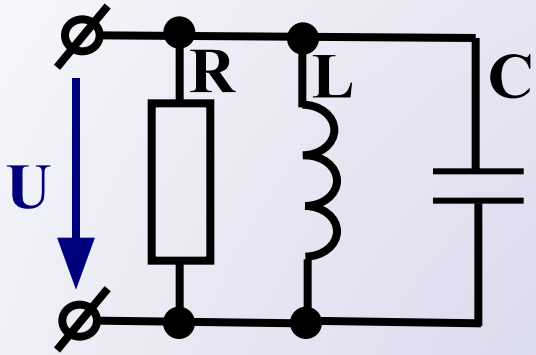


$$\omega \rightarrow 0 \quad \phi = \pi/2$$

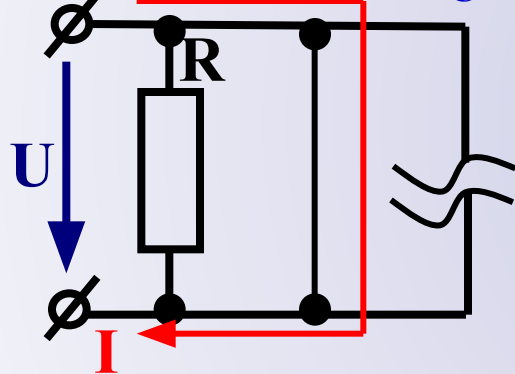
$$\omega \rightarrow \infty \quad \phi = -\pi/2$$

$$\omega = \omega_0 \quad \phi = 0$$

3) Амплитудночастотная характеристика (АЧХ).

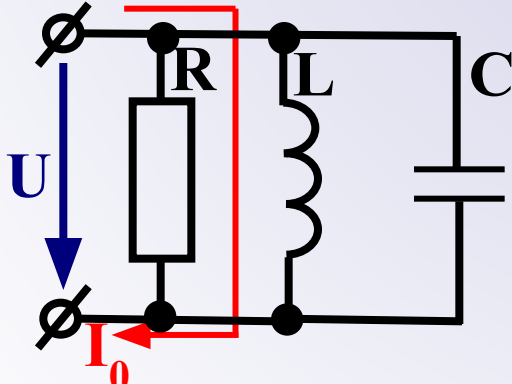


$\omega = 0 \quad b_L = \infty \quad b_C = 0$



$I_L = I$
 $I_C = 0$
 $I_R = 0$
 $U = 0$

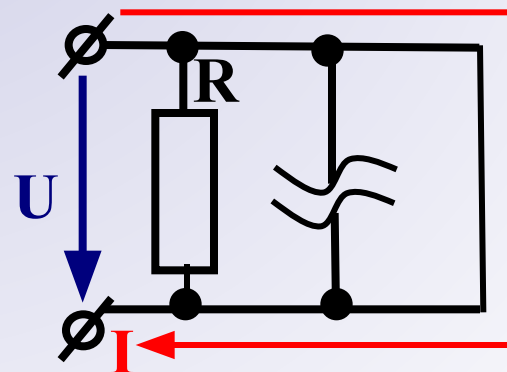
$\omega = \omega_0 \quad b_L = b_C \quad b_{BX} = 0 \quad Y_{BX} = R$



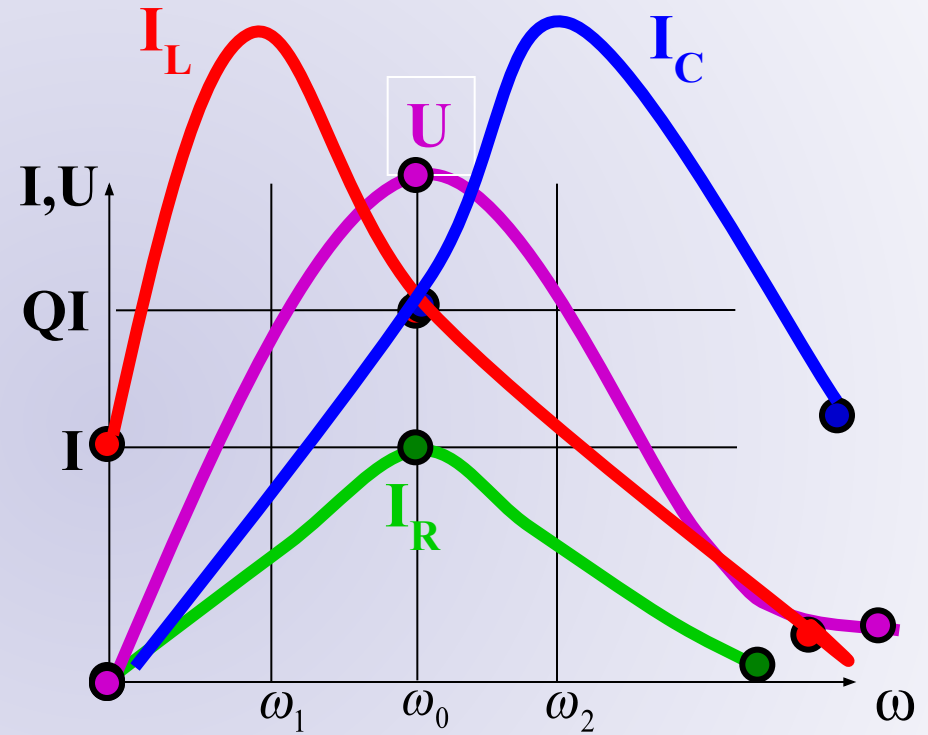
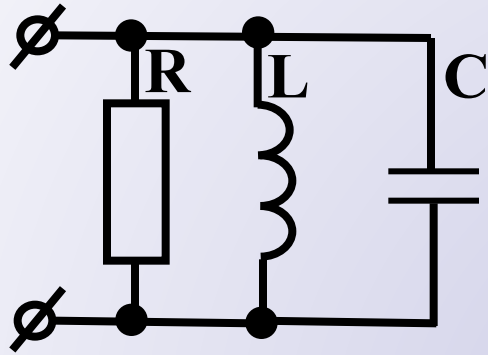
$I_R = I_0$
 $I_C = I_L = QI$
 $U = U$

| | $\omega = 0$ | $\omega = \omega_0$ | $\omega = \infty$ |
|-------|--------------|---------------------|-------------------|
| I_L | I | QI | 0 |
| I_C | 0 | QI | I |
| I_R | 0 | I_0 | 0 |
| U | 0 | U | 0 |

$\omega = \infty \quad b_L = 0 \quad b_C = \infty$



$I_L = 0$
 $I_C = I$
 $I_R = 0$
 $U = 0$



| | $\omega = 0$ | $\omega = \omega_0$ | $\omega = \infty$ |
|-------|--------------|---------------------|-------------------|
| I_L | I | QI | 0 |
| I_C | 0 | QI | I |
| I_R | 0 | I | 0 |
| U | 0 | U | 0 |