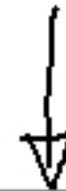


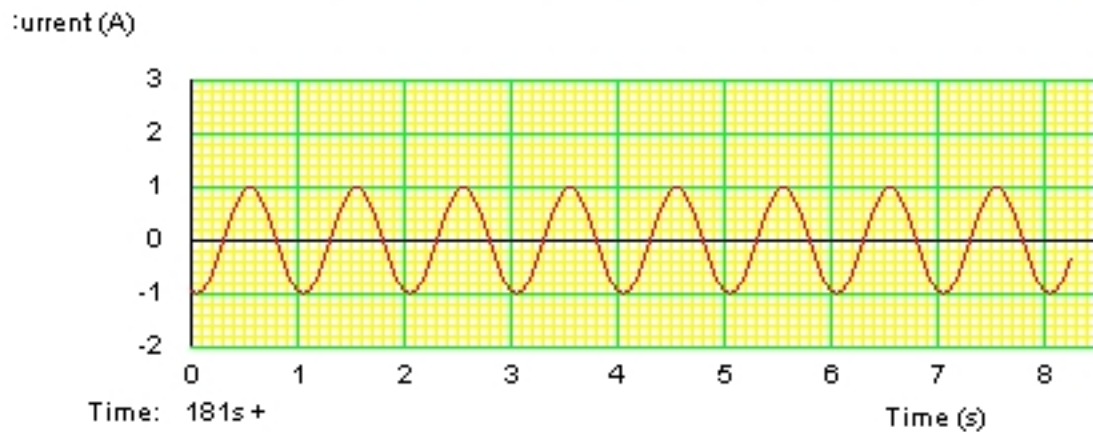
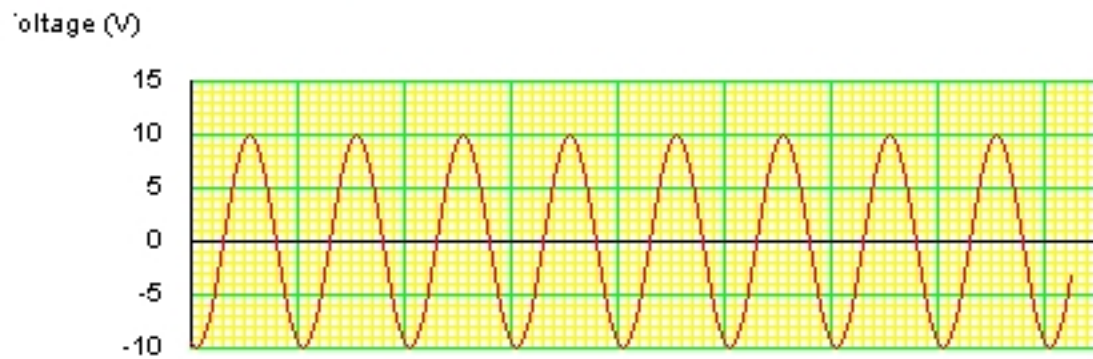
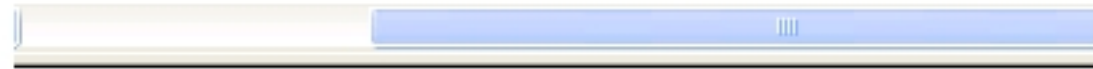
Korronte aldeznoa

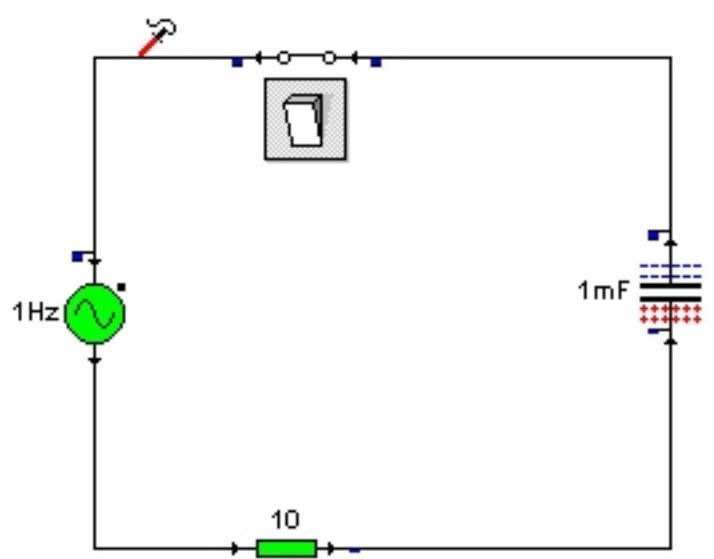
Ohm-en legea, Korronte jarraian bezala

$$I = \frac{V}{R} \rightarrow I_{max} = \frac{V_{max}}{R}$$



$$I_{max} = \frac{10V}{10\Omega} = 1A$$





Kondentsadorea konektatzen, zera ikusten da I-t grafikoan

$$I_{max} \approx 60 \text{ mA} = 0.06 \text{ A}$$

Nola kalkulatu da I_{max} ?

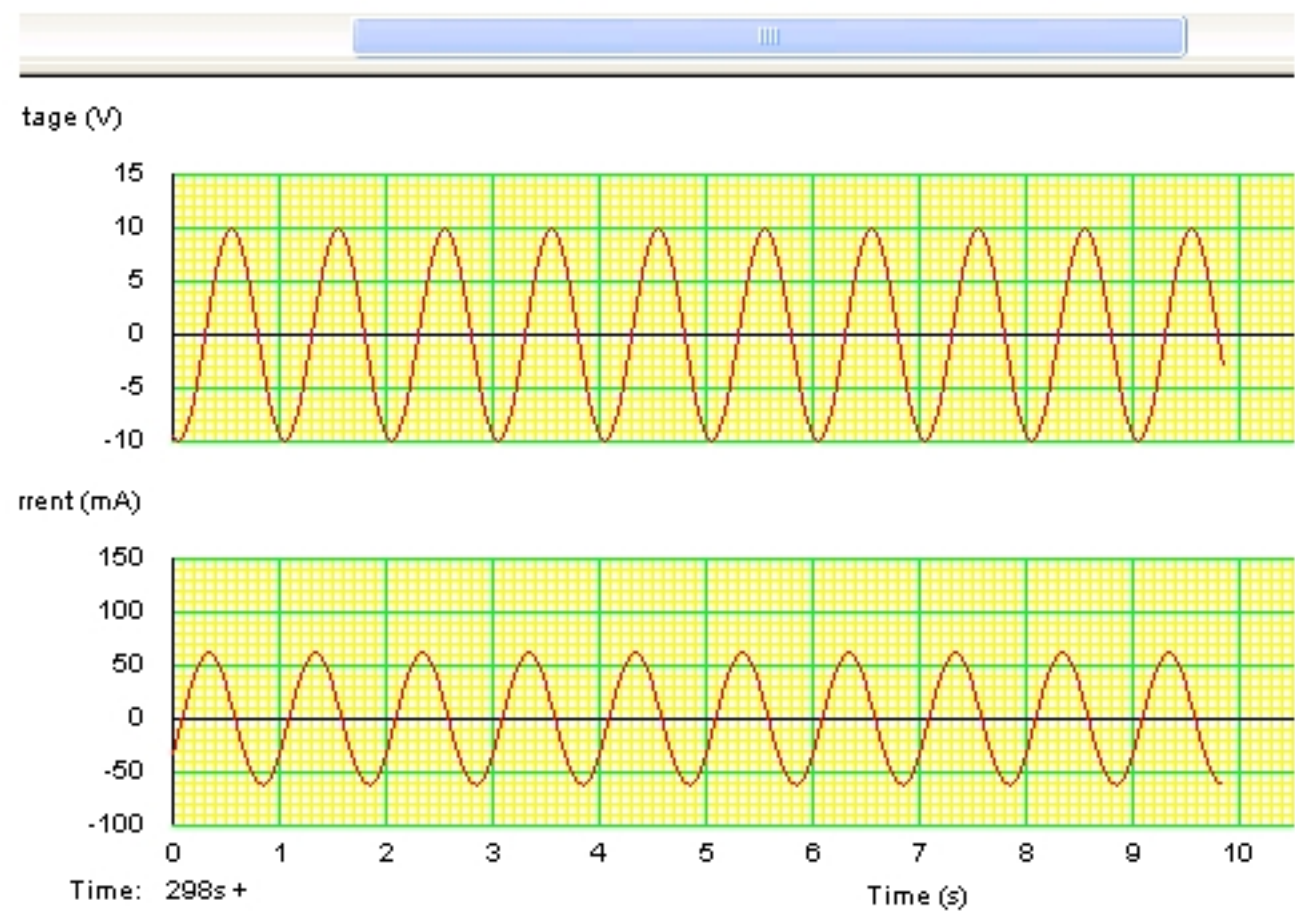
Ohm-en legea
(korronte aldeznoan)

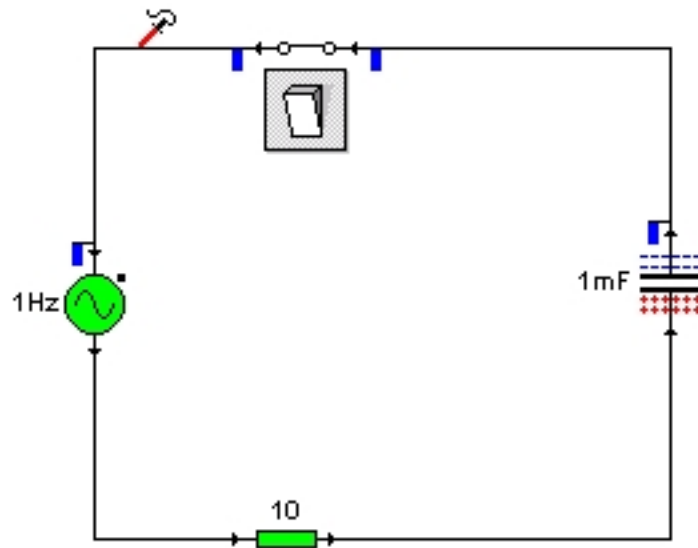
$$I_{max} = \frac{V_{max}}{Z}$$

impedantzia

↓ gure kasuan

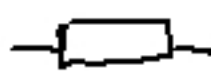

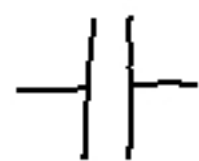
$$I_{max} = \frac{10 \text{ V}}{Z}$$

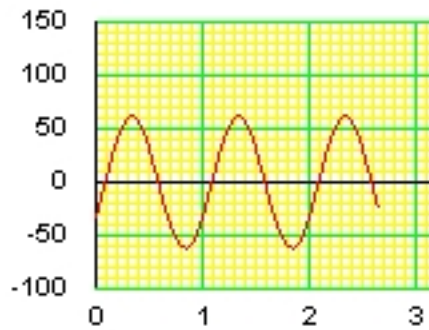




$$Z = \sqrt{R^2 + \left(L\omega - \frac{1}{C\omega}\right)^2}$$

Hona hemen ikuzzen esanahiak:

-  R... erresistentziaren balioa
-  L... hazilaren autoindukzioa
-  C... kondentsadorearen Kapazitatea

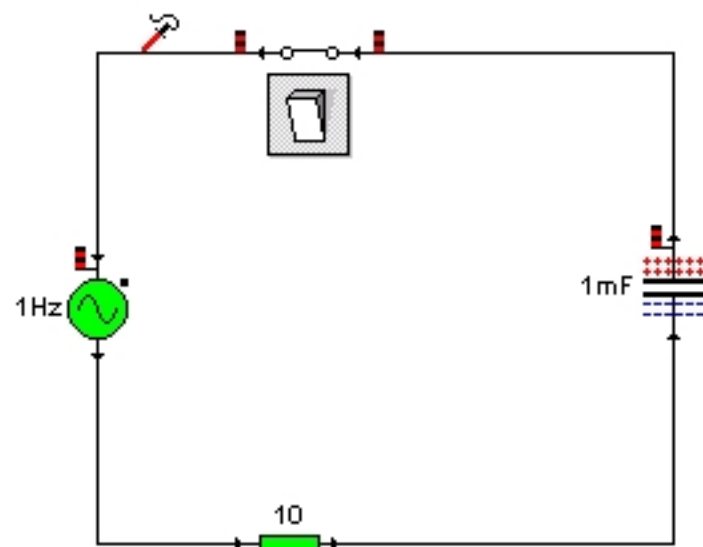


\longleftrightarrow
T = 1 s

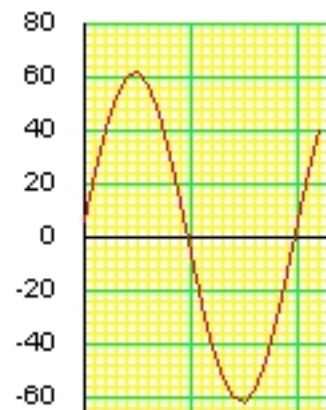
Pultsazioa $\omega = \frac{2\pi}{T} = 2\pi \cdot f$

(T) periodoa \rightarrow ziklo bat osatzeko behar den denbora

(f) maiztasuna \rightarrow zenbat ziklo segunduro egiten diren



Current (mA)



$$I_{\max} = \frac{V_{\max}}{Z} = \frac{10V}{Z}$$

$$Z = \sqrt{R^2 + \left(L\omega - \frac{1}{C\omega}\right)^2}$$

$$R = 10 \Omega$$

$$L = 0$$

$$C = 0.001 \text{ F}$$

$$\omega = \frac{2\pi}{15} = 6.28$$

$$Z = \sqrt{10^2 + \left(0 - \frac{1}{0.00628}\right)^2} = \sqrt{100 + 25356} = 159.5 \Omega$$

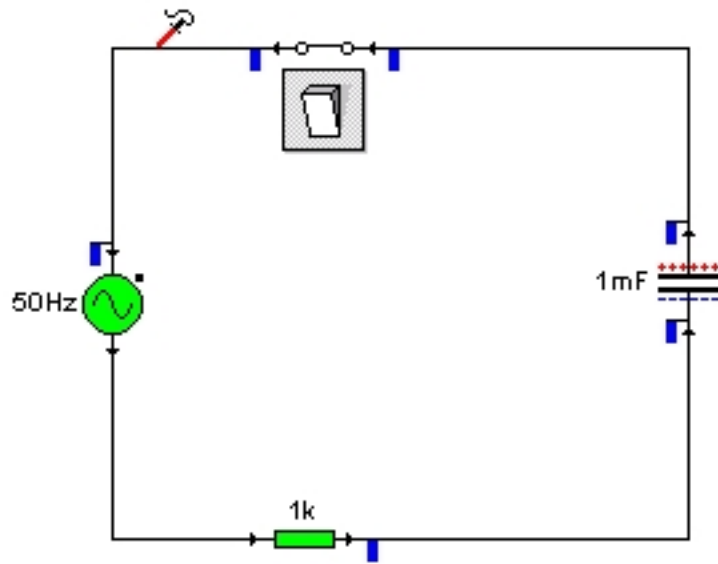
$$I_{\max} = \frac{10V}{159.5 \Omega} = 0.063 \text{ A} = 63 \text{ mA}$$

ARIKETA

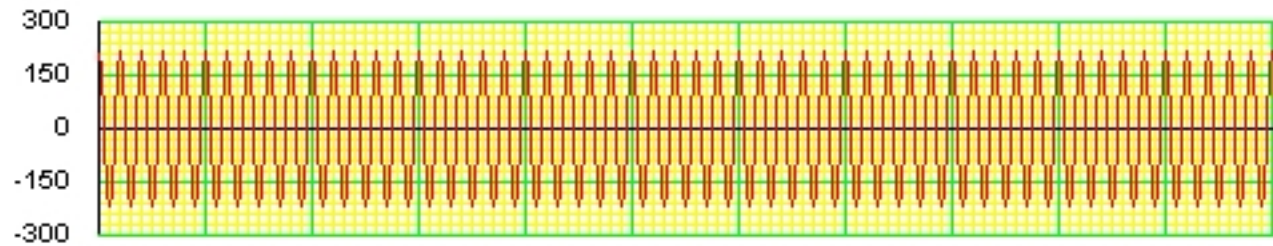
Ondoko zirkuituan,

Kalkulatu I_{max}

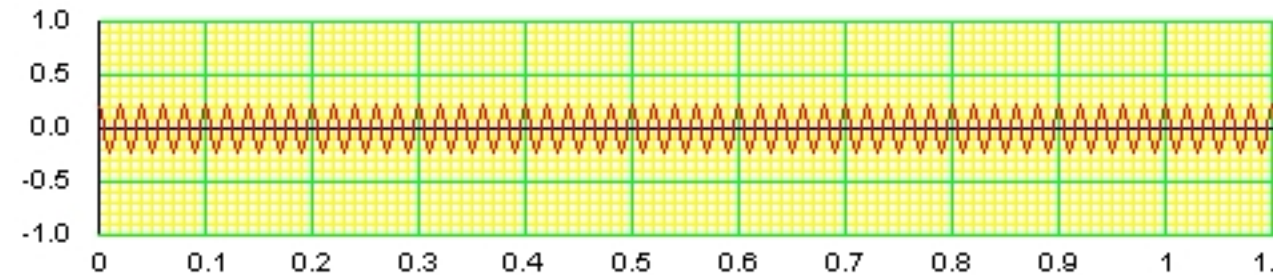
220 V



voltage (V)



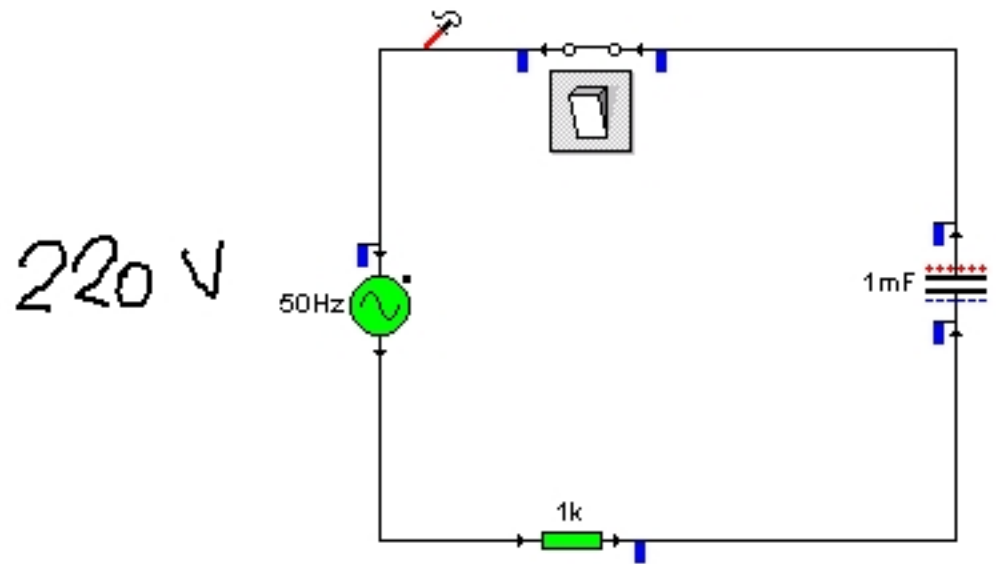
current (A)



Time: 263s +

Time (s)

QBAZPCNA



- Ohm-en legea aplikatuz,

$$I_{max} = \frac{220V}{Z}$$
- Pultsazioaren Z kalkulua:

$$\omega = \frac{2\pi}{T} = 2\pi \cdot f =$$

$$= 2\pi \cdot 50 = 314$$

- Impedantzia

$$Z = \sqrt{10^6 + \left(-\frac{1}{0.314}\right)^2} =$$

$$= \sqrt{1000010} \approx 1000 \Omega$$

- Intentsitate maximoa: $I_{max} = \frac{220V}{1000 \Omega} = 0.22A = 220mA$

