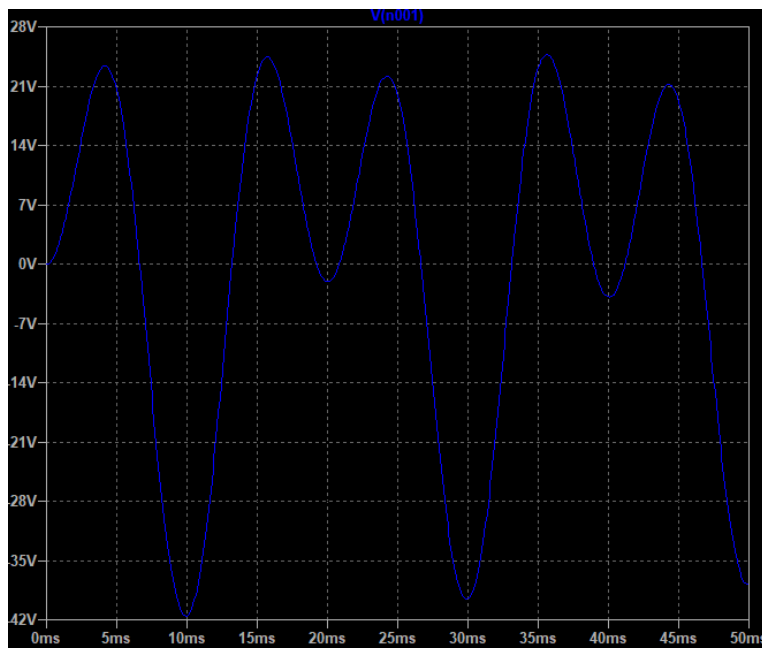


$$X_L = 2\pi fL = 2\pi 100 \cdot 100 \cdot 10^{-3} \approx 62.832\Omega$$

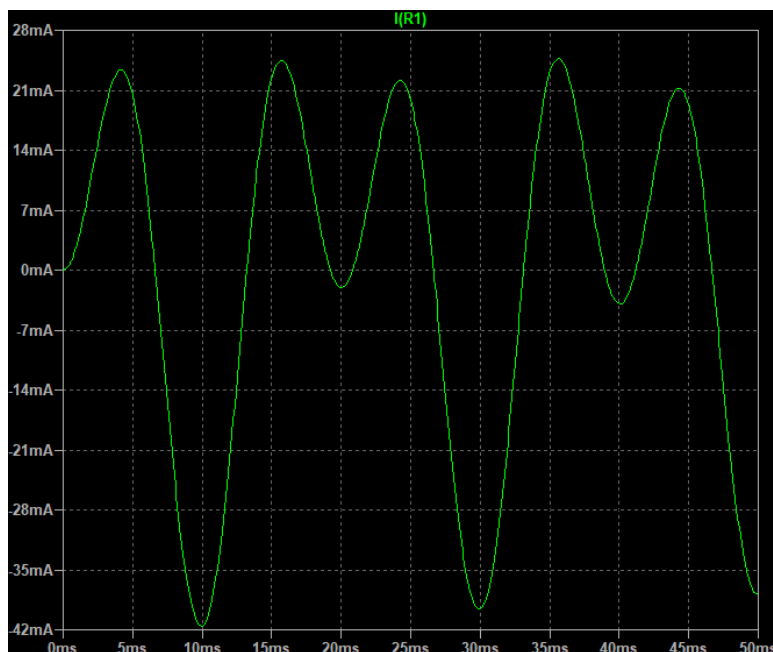
$$X_C = \frac{1}{2\pi fC} = \frac{1}{2\pi 100 \cdot 100 \cdot 10^{-6}} \approx 15.915\Omega$$

$$Z_T = \frac{1}{\left(\left(\frac{1}{R}\right)^2 + \left(\left(\frac{1}{X_L}\right) - \left(\frac{1}{X_C}\right)\right)^2\right)} \approx 21.56\Omega$$

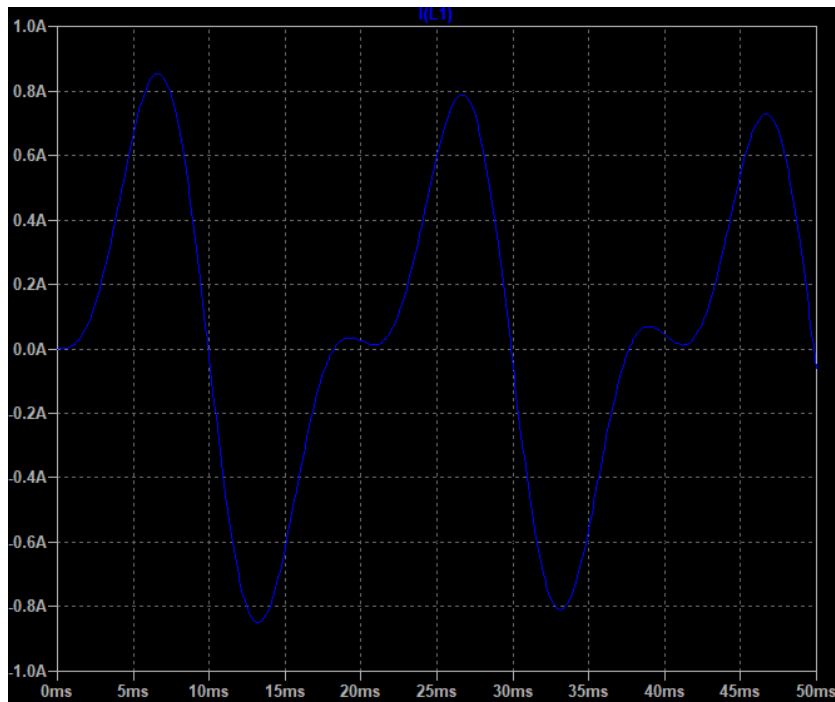
$$V = Z \cdot I \approx 21.56 \cdot 1 \approx 21.56V$$



$$I_R = \frac{V}{R} \approx 21.56mA$$



$$I_L = \frac{V}{X_L} \approx 0.3A$$



$$I_C = \frac{V}{X_C} \approx 1.36A$$

