



$$X_C = \frac{1}{2\pi f C} = \frac{1}{2\pi \cdot 50 \cdot 10 \cdot 10^{-6}} = \frac{10^6}{\pi \cdot 10^3} = \frac{10^3}{\pi} = \frac{1000}{\pi} \approx 318 \Omega$$



