

WE WERE GOING TO USE THE TIME MACHINE TO PREVENT THE ROBOT APOCALYPSE, BUT THE GUY WHO BUILT IT WAS AN ELECTRICAL ENGINEER.

The capacitor has no charge. The switch is closed at t = 0. What is the voltage on the capacitor at t = 0⁺ ?



The capacitor has no charge. The switch is closed at t = 0. What is the voltage on the capacitor at t = 0⁺ ?



 The capacitor has no charge. The switch is closed at t = 0. What is the current through the resistor at t = 0⁺ ?



 The capacitor has no charge. The switch is closed at t = 0. What is the current through the resistor at t = 0⁺ ?



What is the voltage across the capacitor at t=100ms?



• What is the voltage across the capacitor at t=100ms?





- A. High Pass
- B. Low Pass
- C. I'll Pass





- A. 0
- B. ∞
- C. 1/√2



- A. 0
- B. ∞
- C. 1/√2



 Z_{out} at high frequency \rightarrow ?

- A. 0
- Β. ∞
- C. R
- D. R+Zc



 Z_{out} at high frequency \rightarrow ?

- A. 0
- B. ∞
- C. R
- D. R+Zc



 Z_{out} at high frequency \rightarrow ?

- A. 0
- B. ∞
- C. R
- D. R+Zc



Zin at high frequency \rightarrow ?

- A. 0
- B. ∞
- C. R
- D. R+Zc



Β. ∞

C. 1/√2

RLC – what does this circuit do?

