

Chapter 7, Problem 8.

For the circuit in Fig. 7.88 if $v = 10e^{-4t}$ V and $i = 0.2e^{-4t}$ A, $t > 0$

- (a) Find R and C .
- (b) Determine the time constant.
- (c) Calculate the initial energy in the capacitor.
- (d) Obtain the time it takes to dissipate 50 percent of the initial energy.

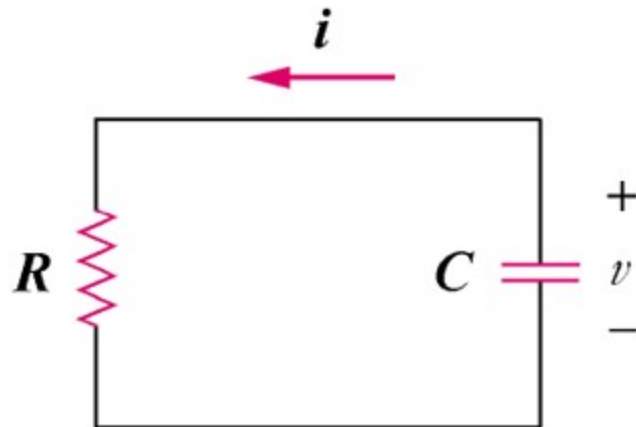


Figure 7.88
For Prob. 7.8.