

A capacitor is in parallel with two current sources. Source I_{SC} is constant with a value of 50 mA. Source I_{SQ} switches on and off between 100 mA and 0 mA, with a period of 20 ms, as shown below. Make a quantitative sketch the corresponding capacitor voltage. Assume that the capacitor voltage $v_C = 5$ V at $t = 0$. (You may want to start by making a sketch of the capacitor current as a function of time.) Be sure to show any calculations used in making the voltage plot.

