

$$v_e(t) = \int_{0-1} \frac{10K}{s(s+a)^2}$$

$$K = \frac{1}{LC}$$

$$a = \sqrt{\frac{1}{LC}}$$

$$= \frac{10K}{a^2} \left(1 - \underline{e^{-at}} + \underline{ate^{-at}} \right)$$

$$= 10 \left(1 - e^{-at} + ate^{-at} \right)$$

$$t=0 \rightarrow v_e(0) = 0$$

$$t \rightarrow \infty \rightarrow v_e(t) \rightarrow 10$$