1 EMag

1.1 Formulae

•
$$E_x = \int \frac{1}{4\pi\varepsilon_0} \frac{1}{r^2} dq = \int \frac{1}{4\pi\varepsilon_0} \frac{\lambda}{r^2} dr$$

•
$$i = I(1 - e^{-\tau/t})$$

$$\bullet \ \tau_{\rm RL} = \frac{R}{L}; \, \tau_{RC} = RC$$

1.2 Notes

• Current/Charge is at max after 5 τ 's