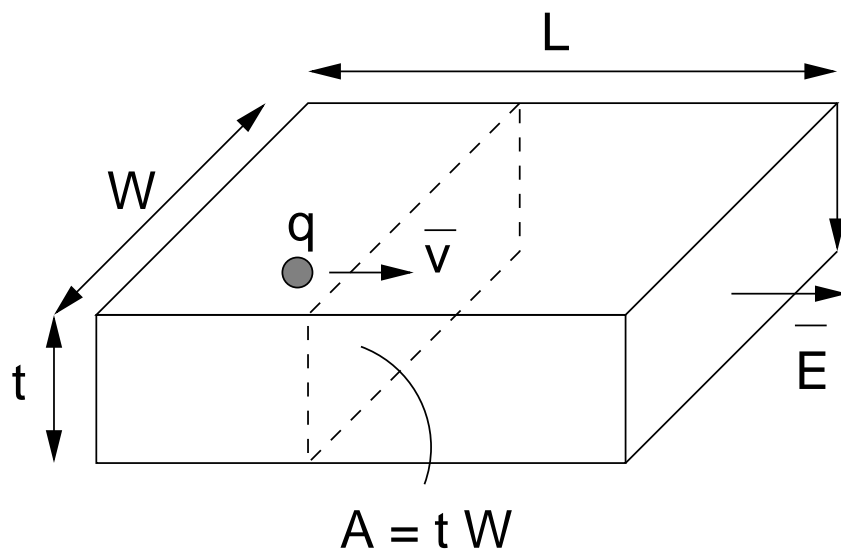


Resistor on Chip



$$\bar{J} = nq\bar{v} = nq\mu\bar{E} = \sigma\bar{E}$$

$$R = \frac{1}{\sigma} \frac{L}{A} = \frac{1}{\sigma t} \frac{L}{W} = R_{\square} \frac{L}{W}$$