

4-39

$$\vec{J} = \sigma \vec{E}$$

$$E = \frac{\Delta V}{d} = \frac{2}{10} = 0.02 \frac{V}{m}$$

$$J = 7 \times 10^5 = \sigma(0.02)$$

$$\sigma = 3.5 \times 10^7 \frac{S}{m}$$

from table 4-1, p85 \Rightarrow Aluminum