

Current of 800mA passed through lamp for 1 minute. Find no. of electrons passing through it if charge of electron is 1.6×10^{-19} C

Solution:

Charge passed through lamp equals:

$$Q = I * t = 0.8A * 60s = 48 C$$

So, number of electrons passed through it:

$$N = \frac{Q}{q_e} = \frac{48}{1.6 * 10^{-19}} = 3 * 10^{20}$$

Answer: $3 * 10^{20}$.

Answer provided by <https://www.AssignmentExpert.com>