

30 A wire carries a current of $0.10\ \mu\text{A}$. The potential difference across the wire is $10\ \text{mV}$.

How much energy is dissipated by the wire in a time of $10\ \text{s}$?

A $1.0\ \text{pJ}$

B $10\ \text{pJ}$

C $1.0\ \text{nJ}$

D $10\ \text{nJ}$

31 What is the definition of the potential difference across a component?