2 The energy E stored in a certain electronic component is given by

$$E = \frac{Q^n}{2k}$$

where Q is the total charge in the component, n is an unknown integer and k is a physical quantity with SI base units $A^2\,s^4\,kg^{-1}\,m^{-2}$.

What is the value of n?

A   -2   **B**   -1   **C**   1   **D**   2