

- 1** 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 $\text{A}^2 \text{s}^4 \text{kg}^{-1} \text{m}^{-2}$.

What is the value of n ?

A -2

B -1

C 1

D 2