

35 A wire of cross-sectional area $5.0 \times 10^{-6} \text{ m}^2$ is made of a metal of resistivity $50 \times 10^{-8} \Omega \text{ m}$.

The potential difference across the wire is 6.0 V and the current is 3.0 A.

What is the length of the wire?

A 0.050 m

B 0.20 m

C 5.0 m

D 20 m