28 When an alternating current, $I = I_0 \sin \omega t$, passes through a resistor, the mean power dissipated in the resistor is *P*. The peak value of the alternating current is then changed to $2\ I_0$ and the frequency is halved.

What is now the mean power dissipated in the resistor?

A *P** **B** $\sqrt{2}\,P$ **C** 2*P** **D** 4*P*