

- 34 A sinusoidal alternating supply of peak voltage 100 V is connected to a diode and a $100\ \Omega$ resistor in series.

The diode is ideal with a zero forward resistance and an infinite reverse resistance.

What is the value of the mean current in the resistor?

- A less than 0.5 A
- B 0.5 A
- C 0.7 A
- D 1 A