

**23** A heater of resistance  $5.0\ \Omega$  dissipates  $125\ \text{W}$  of power when current flows through it. The amount of energy converted to heat when  $0.4\ \text{C}$  of charge passes through it is

**A**  $2\ \text{J}$

**B**  $10\ \text{J}$

**C**  $50\ \text{J}$

**D**  $625\ \text{J}$