

25. The total energy is the sum of the energies stored in the individual capacitors. Since they are connected in parallel, the potential difference  $V$  across the capacitors is the same and the total energy is

$$U = \frac{1}{2} (C_1 + C_2) V^2 = \frac{1}{2} (2.0 \times 10^{-6} \text{ F} + 4.0 \times 10^{-6} \text{ F}) (300 \text{ V})^2 = 0.27 \text{ J} .$$