

4B6 2009 P Migliorato

Answers to numerical questions.

Q1 b) $V_T=0.659V$; c) $Q_F=+3.12 \cdot 10^{-7}C$

Q3 b) (i) $Pr = 23 \mu C \text{ cm}^{-2}$; $E_c = 150 \text{ kV cm}^{-1}$; (ii) $\Delta Q_{n'} = 38 \times 10^{-15} \text{ C}$, $\Delta Q_{p'} = 9.4 \times 10^{-15} \text{ C}$;

(iii) $\Delta E = 4 \times 10^{-14} \text{ J}$