

FIGURE 6.6 Comparison of accurate solutions in the vicinity of an abrupt p - n junction with the results of the depletion approximation: (a) $\rho(x)$; (b) $\mathcal{E}(x)$; (c) $\phi(x)$; (d) $n_o(x)$ and $p_o(x)$. (Dashed lines represent the approximation.)

adapted from Microelectronic devices and circuits, Fonstad, 1994.

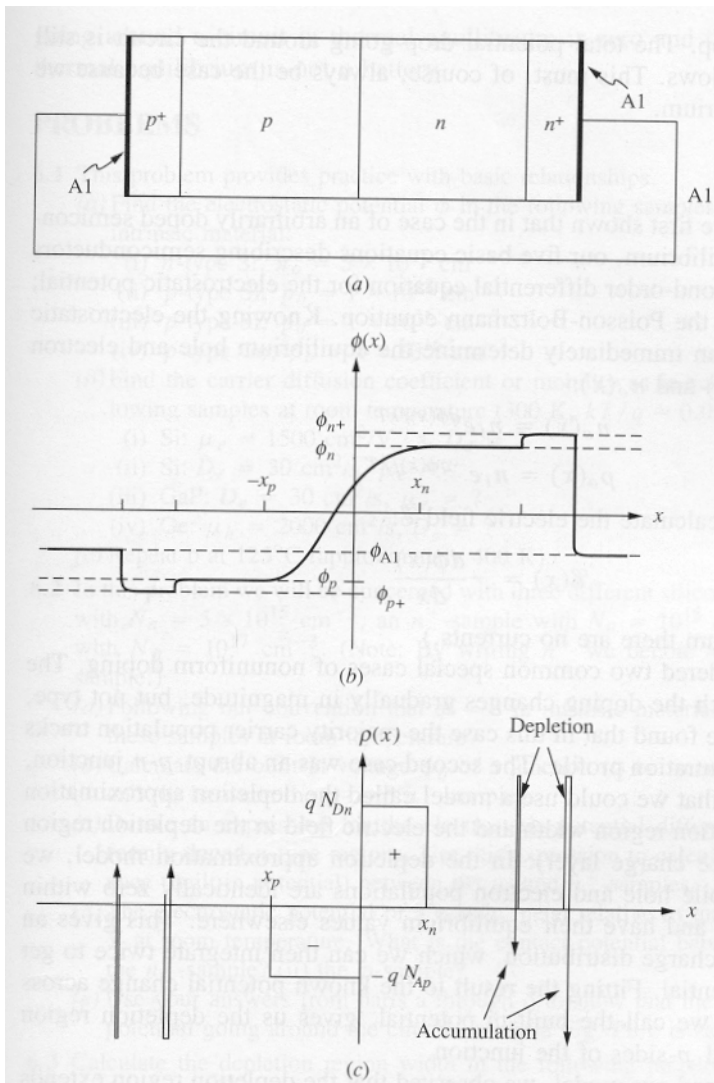


FIGURE 6.8

(a) Typical abrupt $p-n$ diode with two aluminum ohmic contacts and an aluminum wire connecting them; (b) plot of the electrostatic potential through the structure in (a); (c) the corresponding net charge distribution.

adapted from Microelectronic devices and circuits, Fonstad, 1994.