

$$\mathcal{E}(x) = 0 \quad , \text{ for } x \leq -x_p$$

$$\mathcal{E}(x) = -\frac{qN_a(x + x_p)}{\epsilon_s} \quad , \text{ for } -x_p \leq x \leq 0$$

$$\mathcal{E}(x) = \frac{qN_d(x - x_n)}{\epsilon_s} \quad , \text{ for } 0 \leq x \leq x_n$$

$$\mathcal{E}(x) = 0 \quad , \text{ for } x_n \leq x$$