

# Schottky Barriers

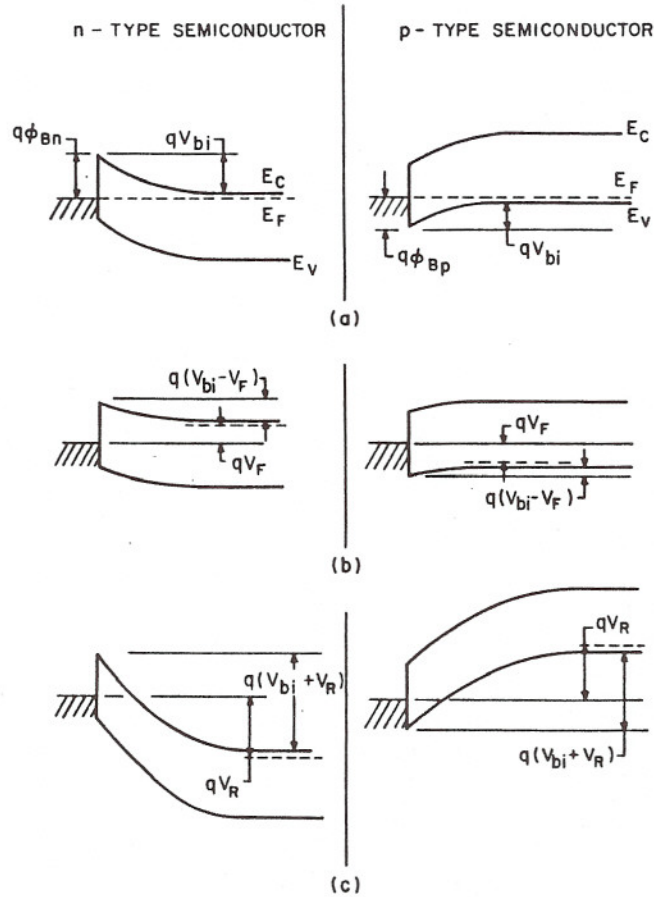


Fig. 2 Energy-band diagram of metal n-type and metal p-type semiconductors under different biasing conditions (a) Thermal equilibrium. (b) Forward bias. (c) Reverse bias.

from S. Sze, Phys. of Semi. Dev.,  
Wiley, 1981, p. 249.

# Critical E Field for Breakdown

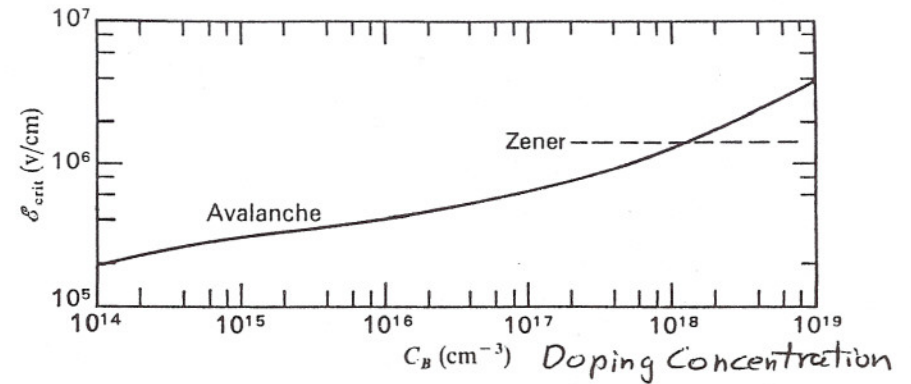


Fig. 6.27 The critical field for avalanche and Zener breakdown in silicon.<sup>5,6</sup>

A. Grove, Phys. and Technol. of  
Semi. Dev., Wiley, 1967, p. 193

# Exper & Theor. Breakdown Voltages

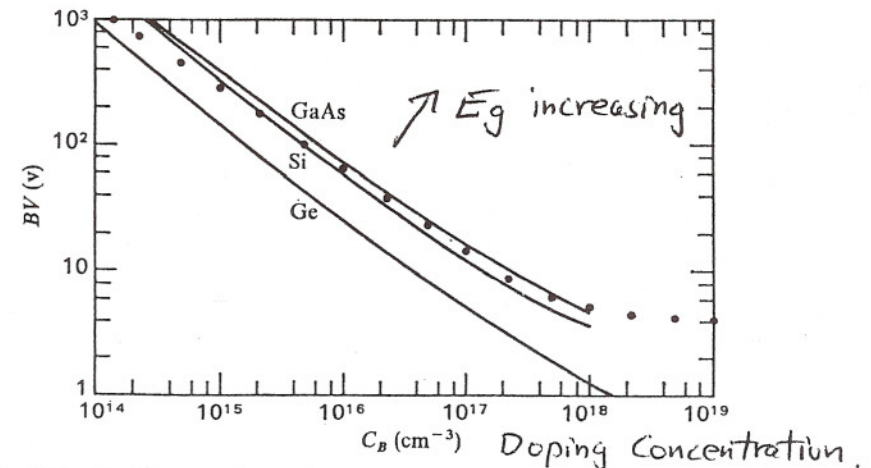


Fig. 6.28 Breakdown voltage of one-sided step-junctions. Points represent direct experimental measurements in silicon;<sup>6</sup> lines were calculated based on ionization rates.<sup>8</sup>

926  
927