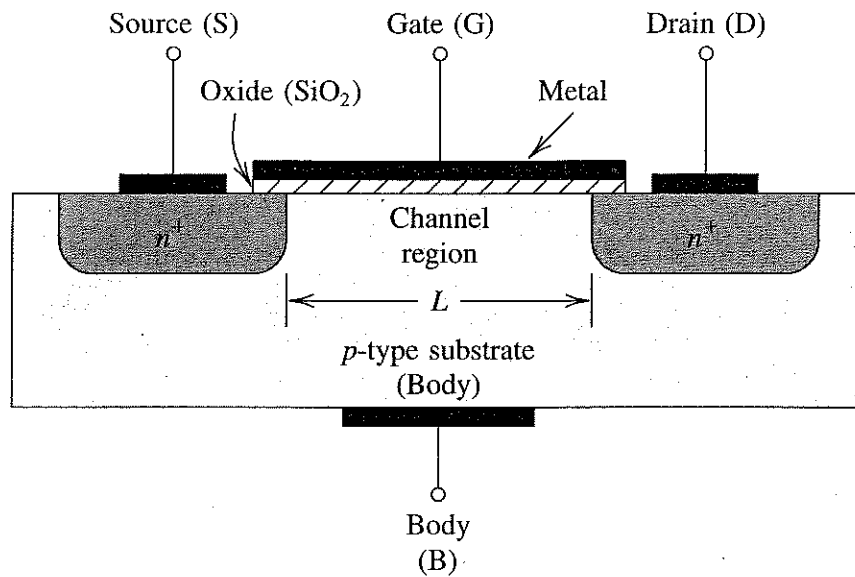


(a)



(b)

**Fig. 5.1** Physical structure of the enhancement-type NMOS transistor: (a) perspective view; (b) cross section. Typically  $L = 1$  to  $10 \mu\text{m}$ ,  $W = 2$  to  $500 \mu\text{m}$ , and the thickness of the oxide layer is in the range  $0.02$  to  $0.1 \mu\text{m}$ .