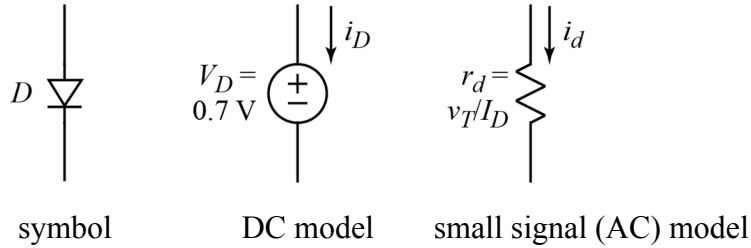
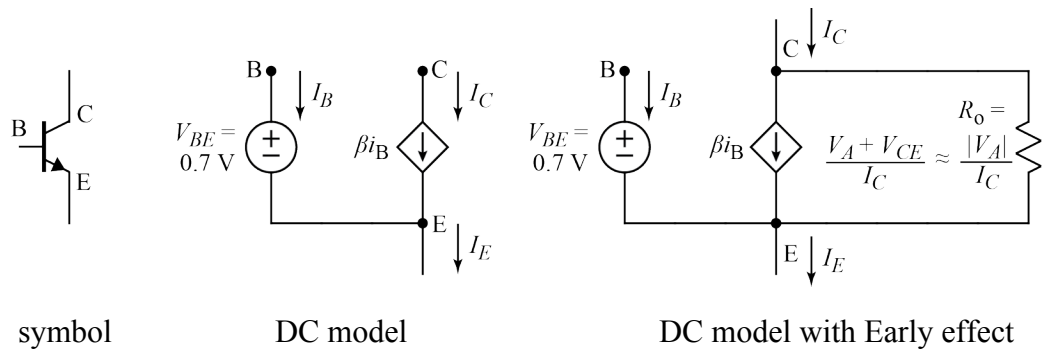


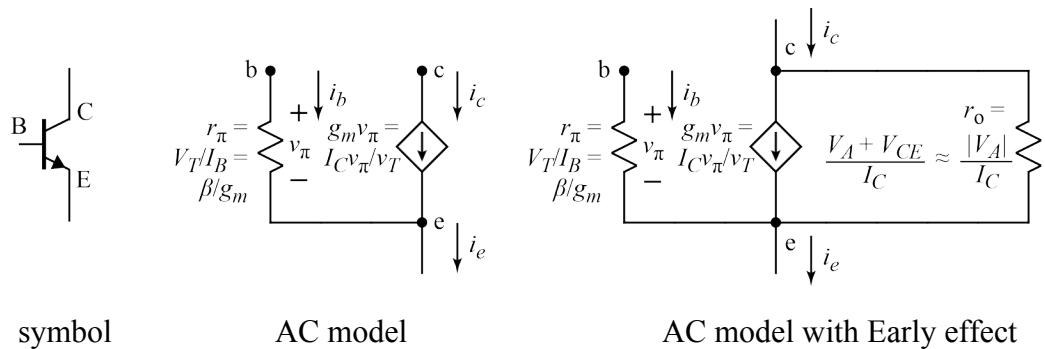
MODEL: Diode (silicon)



MODEL: DC Bipolar Junction Transistor (npn)



MODEL: small signal (AC) Bipolar Junction Transistor (npn)



REF: Adel S. Sedra and Kenneth C. Smith, *Microelectronic Circuits, 5th Ed.*, New York, NY: Oxford University Press, 2004.