

# DC and AC Models

Component	DC Model	AC Model
DC Voltage Source	Use	Short
DC Current Source	Use	Open
AC Voltage Source	Short	Use
AC Current Source	Open	Use
Capacitor	Open	Short
Inductor	Short	Open
Diode	0.7V	$R_{eq} = V_T / I_D^{(DC)}$
BJT BEJ Pi Model	0.7V	$r_\pi$
BJT CEJ Pi Model	$I_C^{(DC)} = \beta I_C^{(DC)}$	$i_c^{(AC)} = g_m v_{be}^{(AC)}$
BJT BEJ T Model	0.7V	$r_e$
BJT CBJ T Model	$I_C^{(DC)} = \beta I_C^{(DC)}$	$i_c^{(AC)} = g_m v_{be}^{(AC)}$