

Lecture 12

Michael Brodskiy

Professor: M. Onabajo

October 21, 2024

- Four-Resistor Bias Circuit
 - Simplify using Thévenin Equivalent
- DC Bias versus Small-Signal Parameters
 - Superposition of DC and AC voltages/currents
 - * V_{BEQ} , V_{CEQ} , and I_{CQ} define the DC operating point (or quiescent point of Q-point)
 - * v_{be} is the small-signal (AC) input voltage
 - * i_c is the small-signal (AC) collector current
 - * v_{ce} is the small-signal (AC) collector-emitter voltage (the AC output voltage of this common-emitter amplitude)
 - * v_{be} is the small-signal (AC) input voltage