

Unit Name: Analogue Electronics 3 Simulation 2

Title

The Common Emitter Amplifier

Details

The purpose of this experiment is to demonstrate the operation of the small signal common emitter amplifier and investigate the factors influencing the voltage gain as well as to determine the input and output impedances.

The common-emitter amplifier is characterized by the application of the input signal to the base lead of the transistor while taking the output from the collector, which always gives 180° phase shift between the input and output signals. Figure 1 presents a schematic diagram for a typical common-emitter amplifier using the voltage-divider bias configuration.