

ELEC2205 D3 – Two-Stage Amplifier Design

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Abstract

1 Theoretical Design

1.1 Voltage Gain Derivation

1.1.1 Stage 1

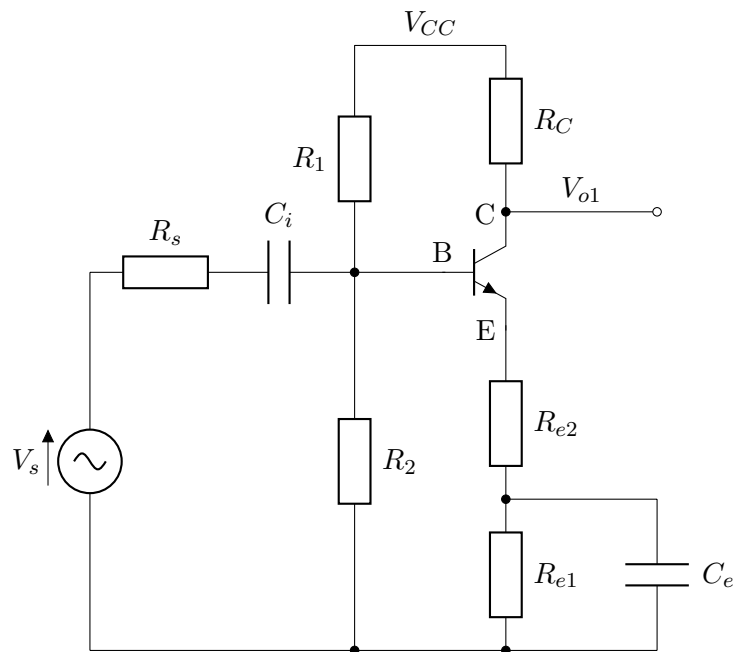


Figure 1: Circuit diagram of the first stage of the amplifier.

In order to derive the voltage gain of this circuit, we need to analyse it using a small signal model. The hybrid- π model will be used.

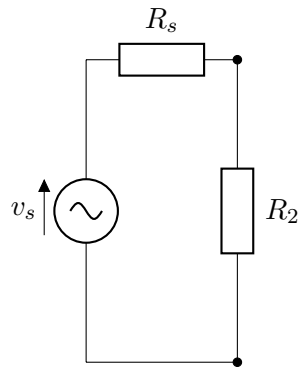


Figure 2: Hybrid- π model of the first stage of the amplifier.

2 Voltage Gain Measurement

3 Impedance Measurement

4 Reflection or w/e

Appendix A Some appendix

References