

Amplifier Topologies

Simon Hobbs

May 2, 2018

Chapter 1

Basic Single BJT

1.1 Common-Emitter

1.2 Common-Base

1.3 Common-Collector

AKA emitter follower

1.4 Emitter Degeneration

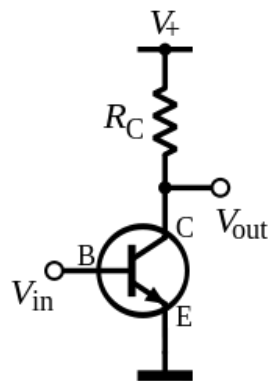


Figure 1.1:

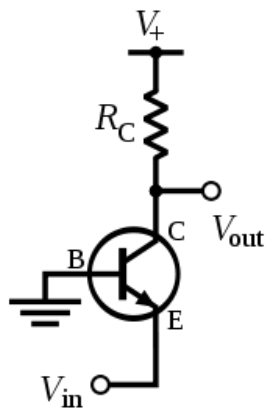


Figure 1.2:

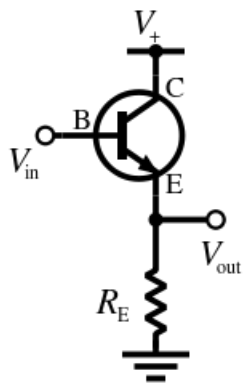


Figure 1.3:

Chapter 2

Basic Single FET

2.1 Common-Source

2.2 Common-Gate

2.3 Common-Drain

Chapter 3

Multisection BJT Amps

3.1 Cascade

3.2 Cascode

3.3 Darlington

3.4 Differential Emitter-Coupled

AKA Long-tail

3.5 Current Mirrors

Chapter 4

Amplifier Concepts

4.1 Bootstrapping