

*Lecture 11 -- Common Base Amplifiers, Active Loads and Cascodes*

Draw a common base amplifier and list a common application

What are  $R_{in}$ ,  $R_{out}$  and  $A_v$  of a common base amplifier

Describe how to develop a T-model for common base amplifier analysis

What is the current gain of a common base amplifier?

Why is it hard to bias a common base amplifier?

Draw a common emitter amplifiers loaded with diodes and PNP devices. What are their  $r_{in}$ ,  $r_{out}$ ,  $a_v$ ,  $V_{O_{MAX}}$  and  $V_{O_{MIN}}$ ?

Draw a CE-CB multistage amplifier (often called a cascode amplifier) loaded with a current source. What is its  $r_{in}$ ,  $r_{out}$ ,  $a_v$ ,  $V_{O_{MAX}}$  and  $V_{O_{MIN}}$ ?