

EE311 LABORATORY

EXPERIMENT DESIGN ASSIGNMENT-1

Design a “Common Emitter Amplifier” by using BC 237/238 bipolar transistor. Amplifier gain should be bigger than 25dB. It should be noted that f_L is less than 10kHz and f_H is bigger than 100kHz. Moreover, I_C is bigger than 2mA and V_{CE} is less than 8V. In this respect, prepare your lab sheet in order to include all the following steps:

- Theoretical background and mathematical clarification of the assignment,
- DC measurement and required explanations,
- Gain measurement and required explanations,
- Observation of frequency behavior of the amplifier and all required explanations.
- Comment on your results.