ECE 443 APPLIED ELECTRONICS - LAB 2
FREQUENCY RESPONSE

G. Sener

Cankaya University, Electronics and Communication Engineering Department,
06810, Yenimahalle, Ankara, Turkey.
email: sener@cankaya.edu.tr

Abstract—This lab experiment aims to teach students the effect of frequency on the operation of linear circuitssuch as the amplifier.

1. METHODS

Parts: BD135 or BD137 bjt transistor, R=100k, R=600, C=0.1uF (2x) caps. 1. Connect the following circuit (Fig.1a).

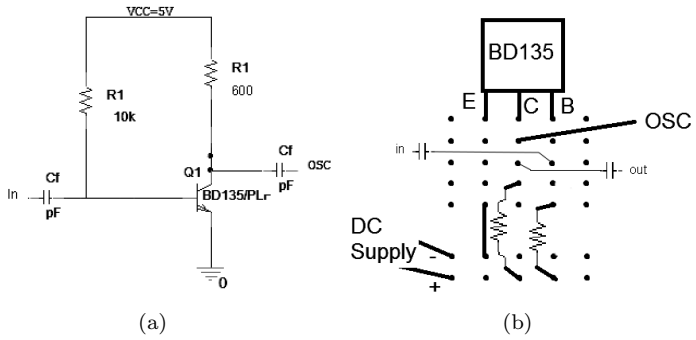

Figure 1. a) Circuit Diagram, b) Circuit layout

2. For Vin amplitude od 20mV, Increase the input frequency (f=1kHz, 100kHz, 1,2,3,4,5,6,7,8,9,10 MHz) and record the output amplitude values. Draw the Gain vs. frequency graph. Make a conclusion. Note: Gain = vout(pk-pk)/vin(pk-pk).