

ELEC 306 Electronics I Optional Project
Due on Monday 09 Dec 2013

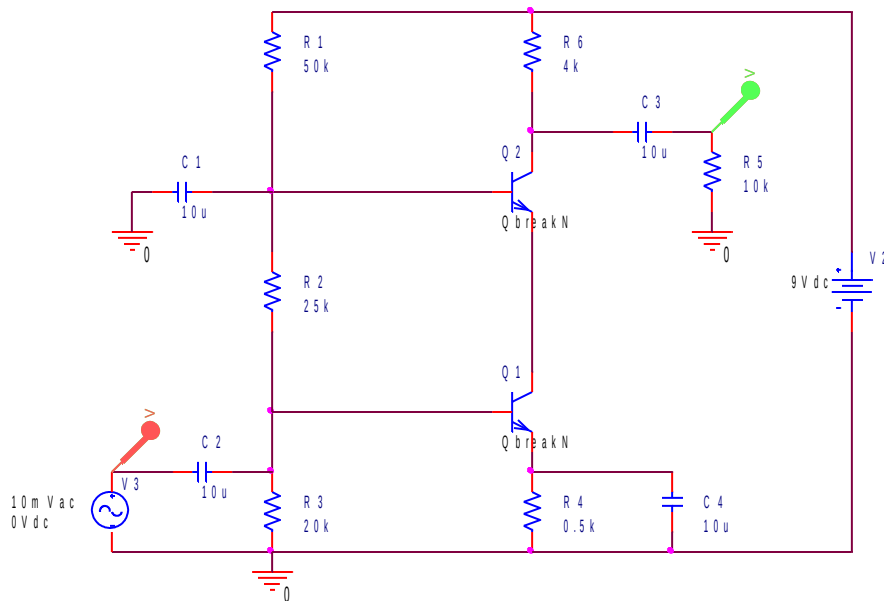
This assignment is NOT REQUIRED. Successful submissions will earn a maximum of 2 additional HW points.

Multistage Amplifier: The BJT Cascode Circuit

Objective: To determine the response of a cascode circuit, and verify results using Pspice software.

Assignment:

- 1) Read section 6.9.3 of the course text.
- 2) Using hand calculation find (a) I_{CQ} , V_{CEQ} , and g_m for both Q1 and Q2.
- 3) Compute the voltage gain A_v .
- 4) Find the frequency response (100 – 10M Hz) using Pspice AC sweep analysis.



Report:

1. Neat and organized hand calculations for part 2 & 3 above.
2. Circuit diagram.
3. Print out of the frequency response plot of part 4.
4. Compare the computed gain A_v to that obtained from the frequency response plot.