

ELEC-313
Lab 7: MOSFET Amplifier Circuits

November 11, 2013

Date Performed: November 06, 2013
Partners: Charles Pittman
Stephen Wilson

1 Objective

2 Equipment

MOSFET: 2N7000

Function Generator: HP 33120

Oscilloscope: Agilent 54622D

Resistors: $100\ \Omega$, $300\ \Omega$, $470\ \Omega$, $1\ \text{k}\Omega$ (x2)

$33\ \text{k}\Omega$, $100\ \text{k}\Omega$ (x2)

Power supply: HP E3631A

Multimeter: HP 34401A

Capacitors: $0.1\ \mu\text{F}$

3 Schematics

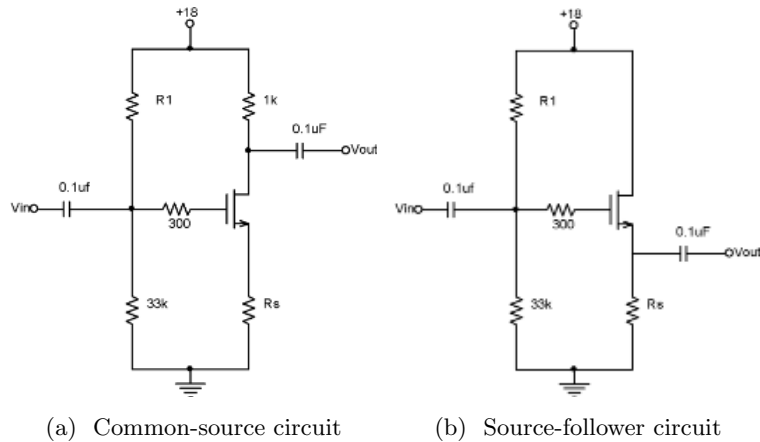


Figure 1: Circuits used in this lab.

4 Procedure

4.1 Common-Source Amplifier

4.2 Source-Follower Amplifier

5 Results

6 Conclusion

7 Equations

$$V_{o,L} = V_{o,NL} \frac{R_L}{R_o + R_L} \quad (1)$$