ECE 4043
Homework Assignment No. 5
Fall 2018 Homework Problem Set No. 5 for Experiment No. 5
Due Week of October 1

1. Using the N Channel JFET supplied, determine the value of the dominant SPICE parameters, \( \beta_o, V_{TO} \), and \( \lambda \) by obtaining the output characteristic with a curve tracer.
2. Design a JFET current source having a value of 1.73 mA.
3. Verify the design with a SPICE simulation. Perform both a DC operating point and parameter sweep of the resistor \( R_S \). Use a log sweep of \( R_S \) from 1 \( \Omega \) to 10 k\( \Omega \). Compare the results of the DC operating point and the parametric sweep.