

ECE 4043

Spring 2020 Homework Problem Set No. 2 for Experiment No. 1

Due Week of January 27

1. Determine the three SPICE parameters measured, viz., V_A , β_o , and I_{SO} from the data taken from either the Tektronix Curve Tracer or the Keysight Curve Tracer for the 2N3904 NPN BJT. Plot the output and transfer characteristics of the NPN BJTs for which the characteristics were measured in lab using the Curve Tracer using SPICE to make the plots. Compare the SPICE simulations with the plots obtained from the curve tracer.