

ELEC-313
Lab 2: Diode Characterization

September 20, 2013

Date Performed: September 18, 2013
Partners: Charles Pittman
Stephen Wilson

1 Objective

2 Schematics

Circuit Tested

Test Configuration

3 Procedure

4 Results

4.1 Part A

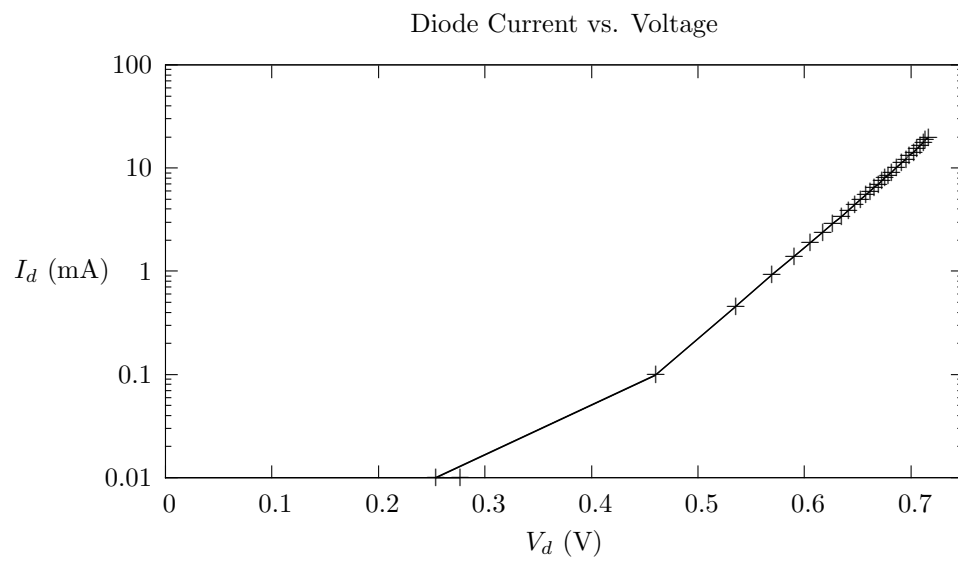


Figure 1: Diode characteristics measured in Part A.

4.2 Part B

5 Conclusion

6 Appendix

Equations

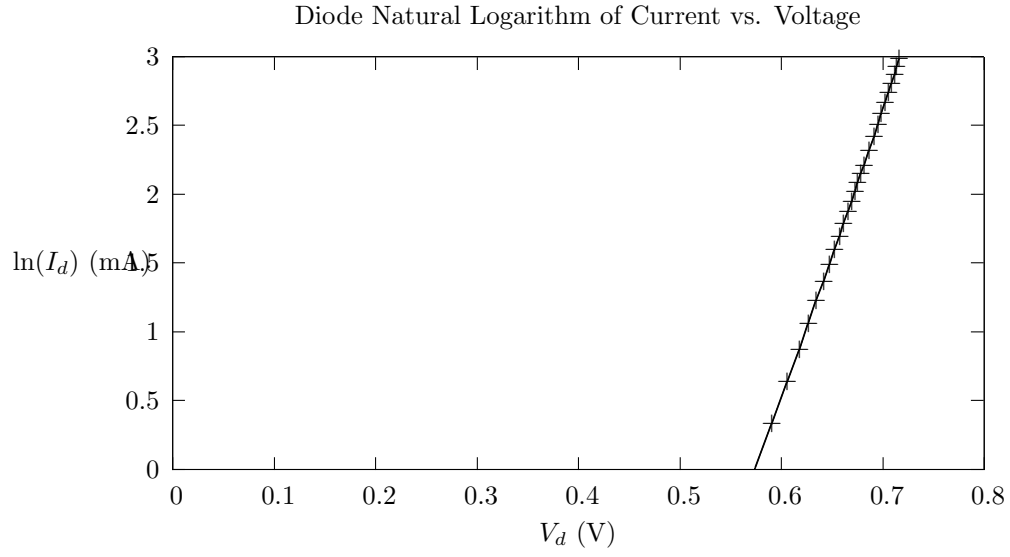


Figure 2: $\ln(I_d)$ vs. V_d .

$R\ (\Omega)$	$V_d\ (\text{V})$	$I_d\ (\text{mA})$
200	0.751	46.00
500	0.713	18.60
1k	0.682	9.30
2k	0.650	4.70
5k	0.605	1.85
10k	0.571	0.94
20k	0.538	0.47
50k	0.494	0.19
100k	0.464	0.10

Table 1: Diode characteristics measured in Part B.

$V_d\ (\text{V})$	$I_d\ (\text{mA})$	$V_{OC}\ (\text{V})$
0.712	27.2	6.70

Table 2: Diode characteristics measured in Part C.