

LAB 5 Phys 536

Agam Chopra

Part 1

Voltage: 500 mV Resistor: 14 ohms
Comment: Positive voltage cut off
Total Voltage: 1.02 V

Part 2

V_transformer: 3V
R: 990 ohms
v_a: 175mV
V_diode: 1.92V

Part 3

Comment Waveform moves without capacitor

Part 4

V_0 0.06V
V 0.775V
R_2 1000Ohm
r_z 83.91608392Ohm

Part 5

V_0 0.06V
V_out 1.56V
dV_0 1.5V
V_c 1.6V
dV 0.46V
V_0_470 1.14V
dV_0 0.402580645V
dV_0_measured 0.42V
max(I_0) -0.00154A
max(I_0)_Fix 0.01286A Smaller than expected, multiplying V_c by an order of 10

Part 6

V_C 17V
V_z 6.2V
V_c 8.03V
V_0 5.12V
-14
V_c 8.04V Guess -15
V_0 5V 2V
V_c-V_0 3.04V
-16
V_0 @ V_c 7V 5V
V_0 @ V_c 25V 5V
Got same value

