Homework for Chapter 3

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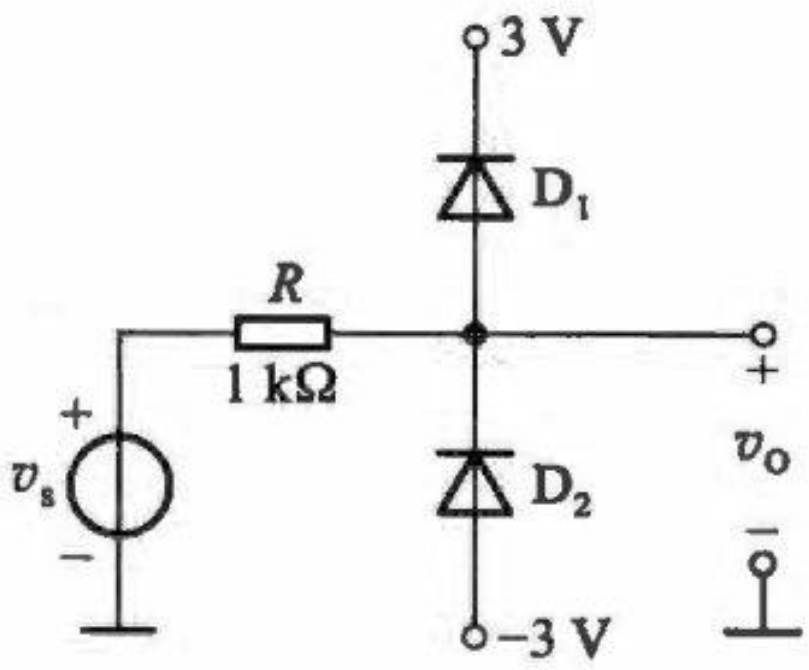
March 21, 2020

3.4.7 电路如图题 3.4.7 所示，D_1、D_2为硅二极管，当 $v_s = 6\sin \omega t$ V 时，试用恒压降模型分析电路，绘出输出电压 v_O的波形。

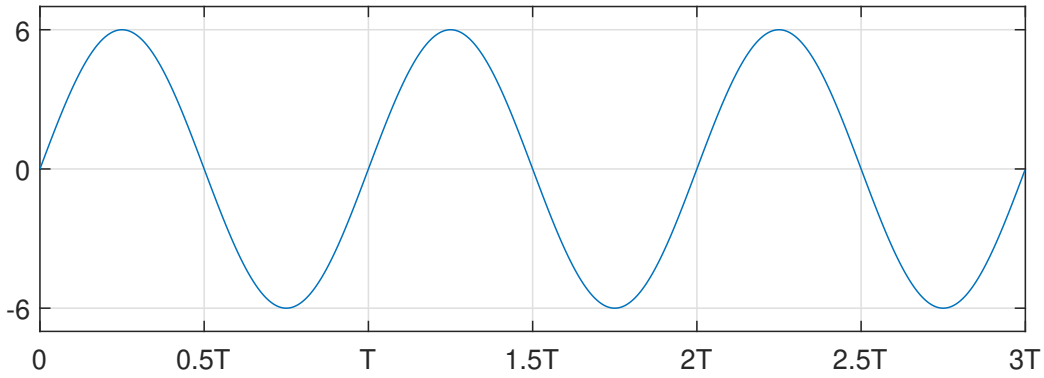


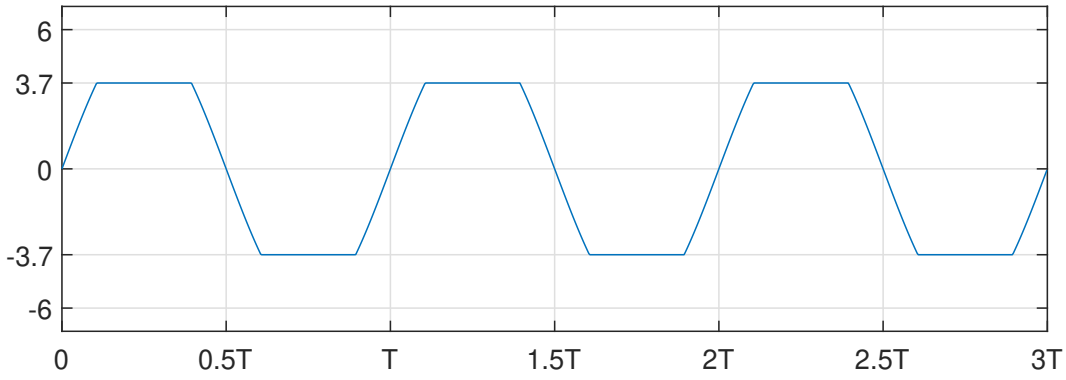
图题 3.4.7

From the circuit we shall know, if the forward voltage of the 2 dipoles are 0.7 V:

- A current flows in D_1 whenever $v_s > 3.7$ V
- A current flows in D_2 whenever $v_s < -3.7$ V

So that the voltage is being restricted between ± 3.7 V


6
0
-6
0
0.5T
T
1.5T
2T
2.5T
3T


6
3.7
0
-3.7
-6
0
0.5T
T
1.5T
2T
2.5T
3T