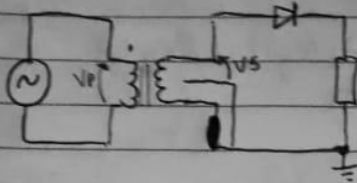


Edmundo H. P. Silva

675

GEB



$$R_L = 1k\Omega$$

$$I_{L(avo)} = 127V_{(rms)} / (9 + 9)V_{(cf)}$$

$$V_{diode} = 0,7V$$

a)  $8,3\sqrt{2} = 11,73 V_{(rms)}$

b)  $\frac{11,73}{\pi} = 3,73 V_{(av)}$

c)  $8,3 V_{(rms)}$

d)  $68,89 - 13,91 = 7,41 V_{(rms)}$

e)  $7,41 \cdot 100 = 198,65\%$

f)  $12,72 - 0,7 \Rightarrow I_{D(m)} = 12,02 mA \Rightarrow I_{D(av)} = 3,82 mA$

g)  $12,02 mA$

h)  $-12,72 V \Rightarrow PIV$

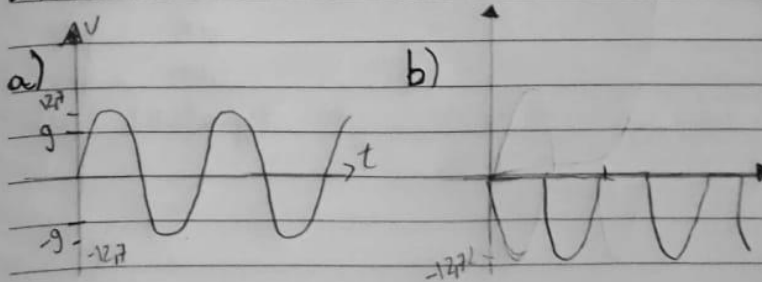
i)  $127 V_{(rms)} / 9 V_{(rms)} = 14,11$

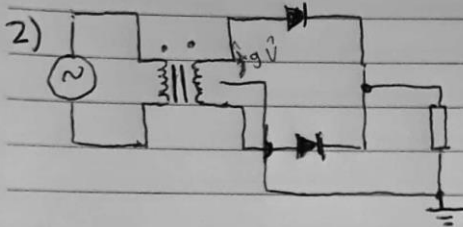
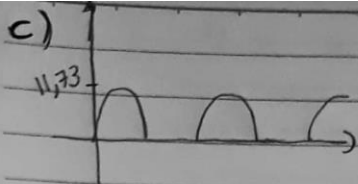
j)  $P_{(rms)} = 8,3 \cdot 9 \times 10^{-3} = 74,7 mW$

k)  $3,82 \times 10^{-3} \cdot 3,73 = 14,24 mV$ ;  $7,41 \cdot 9 \times 10^{-3} = 66,7 mW$

$80,94 mW$

l) Sim.





$$R_L = 1 \text{ k}\Omega$$

$$T = 127 \text{ V}_{\text{eff}} / 9 \text{ V}_{\text{eff}}$$

a)  $12,037 \text{ V}_0(\text{m})$

b)  $7,662 \text{ V}_0(\text{av})$

c)  $8,511 \text{ V}_0(\text{rms})$

d)  $\sqrt{(8,511)^2 - (3,831)^2} = 7,6 \text{ V}_0(\text{rms})$

e)  $\frac{7,6}{7,662} = 99,17\%$

f)  $3,831 \text{ mA}$

g)  $12,037 \text{ mA}$

h)  $-12,037$

