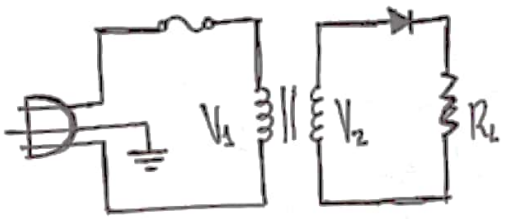
$$\frac{n_1}{n_2} = \frac{V_1}{V_2}$$

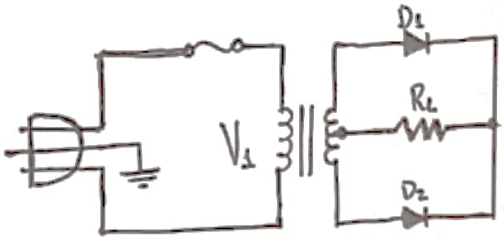
- Retificador de meia onda:



$$V_p = V_{2(pico)} - 0,7 = V_2\sqrt{2} - 0,7$$

$$V_{cc} = \frac{V_p}{\pi}$$

- Retificador de onda completa:

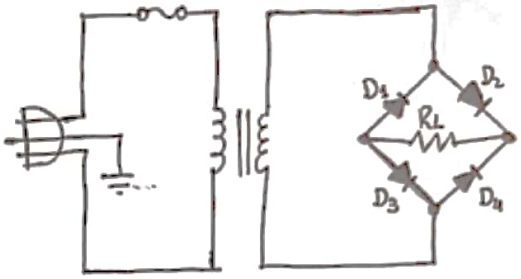


$$V_{SAÍDA(pico)} = \frac{V_2\sqrt{2}}{2} - 0,7$$

$$V_{cc} = \frac{2V_{saída(pico)}}{\pi}$$

$$I_{cc_D} = \frac{I_{cc_{RL}}}{2}$$

- Retificador em ponte:



$$V_{SAÍDA(PICO)} = V_2\sqrt{2} - 1,4$$

$$V_{cc} = \frac{2V_{SAÍDA(PICO)}}{\pi}$$

$$I_{cc_{D1}} = \frac{I_{cc_{RL}}}{2}$$

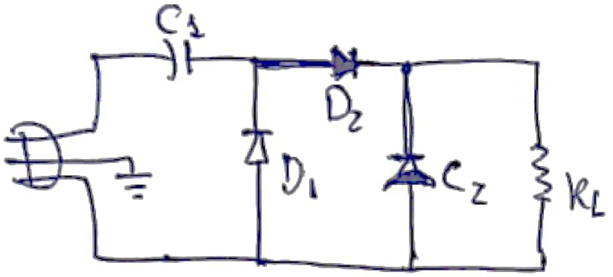
- Ondulação:

$$V_{ond} = \frac{I_{cc}}{fC}$$

$$V_{cc} = \frac{2fRCV_{máx}}{1+2fRC}$$

f: 60Hz (meia Onda).
120Hz (Onda completa ou em ponte)

Dobrador de meia onda



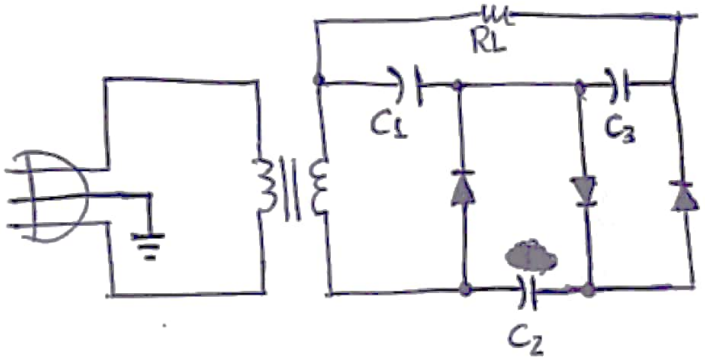
$$V_{RL} = 2 \cdot V_2\sqrt{2}$$

$$PIV \geq 2V_2\sqrt{2}$$

$$V_{C1} = V_2\sqrt{2}$$

$$V_{C2} = 2V_2\sqrt{2}$$

Triplicador de meia onda



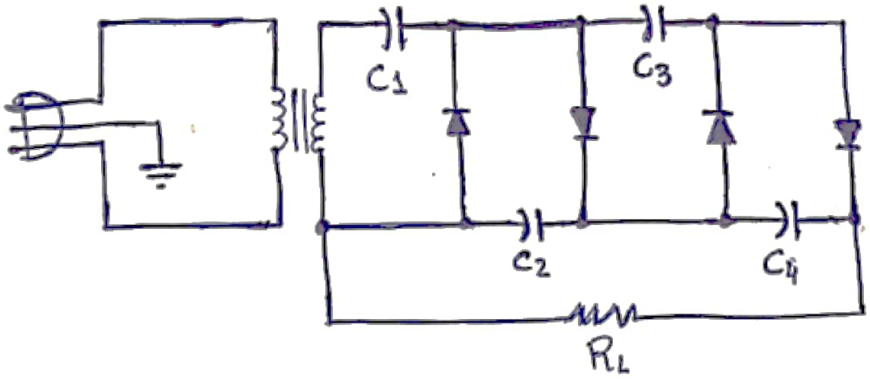
$$V_{RL} = 3V_2\sqrt{2}$$

$$V_{C1} = V_2\sqrt{2}$$

$$PIV \geq 2V_2\sqrt{2}$$

$$V_{C2} = V_{C3} = 2V_2\sqrt{2}$$

Quadruplicador



$$V_{RL} = 4V_2\sqrt{2}$$

$$V_{C1} = V_2\sqrt{2}$$

$$PIV \geq 2V_2\sqrt{2}$$

$$V_{C2} = V_{C3} = V_{C4} = 2V_2\sqrt{2}$$