

$$I_{ce} = \frac{I_s}{\pi} \quad I_s = \frac{V_s}{R_L}$$

$$P_{ce} = V_{ce} \cdot I_{ce}$$

$$P_{ce} = \frac{V_{ce} \cdot I_s}{\pi}$$

$$P_{ce} = \frac{V_{ce} \cdot V_s}{\pi R_L}$$

$$P_{ce} = \frac{2 V_{ce} V_s}{\pi R_L}$$

$$P_{ce} = \frac{2 V_{ce} \cdot V_{ce}}{\pi R_L}$$

$$P_{ce} = \frac{2 V_{ce}^2}{\pi R_L}$$

$$P_s = \frac{I_s \cdot V_s}{2}$$

$$P_s = \frac{V_s \cdot V_s}{2 R_L}$$

$$P_s = \frac{V_s^2}{2 R_L}$$

$$\eta\% = \frac{P_s}{P_{ce}} \times 100$$

$$\eta\% = \frac{V_{ce}^2}{2 R_L} \cdot \frac{1}{\frac{2 V_{ce}^2}{\pi R_L}} \times 100$$

$$\eta\% = \frac{\pi}{4} \times 100$$

$$\eta\% = 78.5\%$$

$$2P_{dT} = P_{CC} - P_s$$

$$V_s = \frac{2V_{CC}}{\pi}$$

$$2P_{dT} = \frac{2V_{CC} \cdot V_s}{\pi R_L} - \frac{V_s^2}{2R_L}$$

$$P_{dT} = \frac{V_{CC} \cdot V_s}{\pi R_L} - \frac{V_s^2}{4R_L}$$

$$P_{dT} = \frac{V_{CC}}{\pi R_L} \cdot \frac{2V_{CC}}{\pi} - \frac{V_{CC}^2}{\pi^2} \cdot \frac{1}{R_L}$$

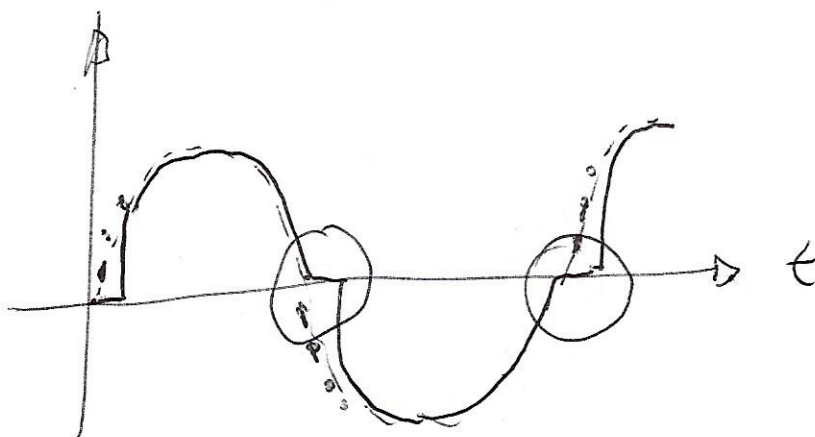
$$\frac{\partial P_{dT}}{\partial V_s} = \frac{V_{CC}}{\pi R_L} - \frac{2V_s}{4R_L}$$

$$P_{dT} = \frac{2V_{CC}^2}{\pi^2 R_L} - \frac{V_{CC}^2}{\pi^2 R_L}$$

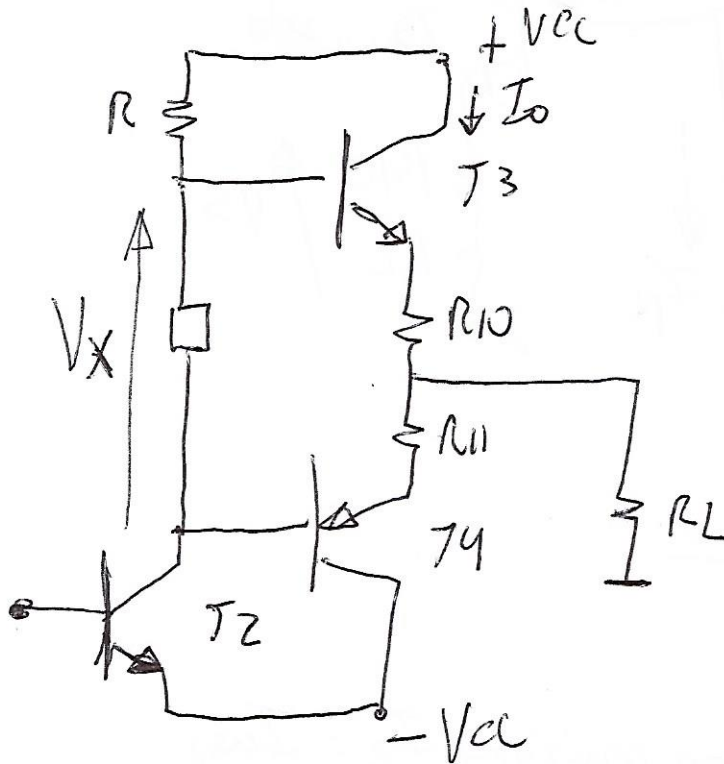
$$\frac{V_s}{2R_L} = \frac{V_{CC}}{\pi R_L}$$

$$P_{dT} = \frac{V_{CC}^2}{\pi^2 R_L} \quad P_{dT} = \frac{V_{CC}^2}{10R_L}$$

Distorsión de canal por cero (CROSSOVER)

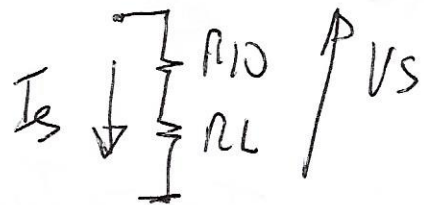


Se coloca un dipolo entre bases o gates

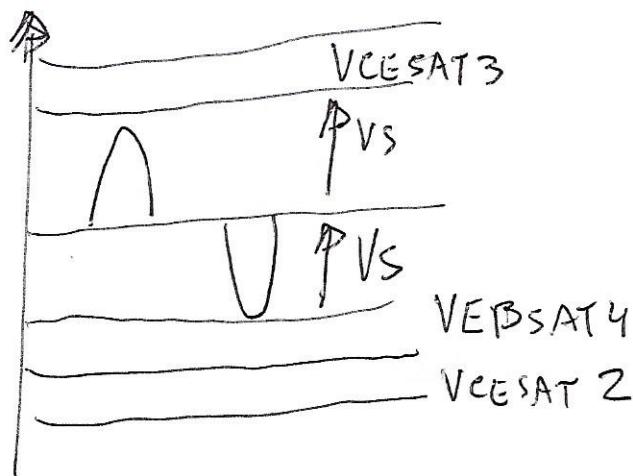


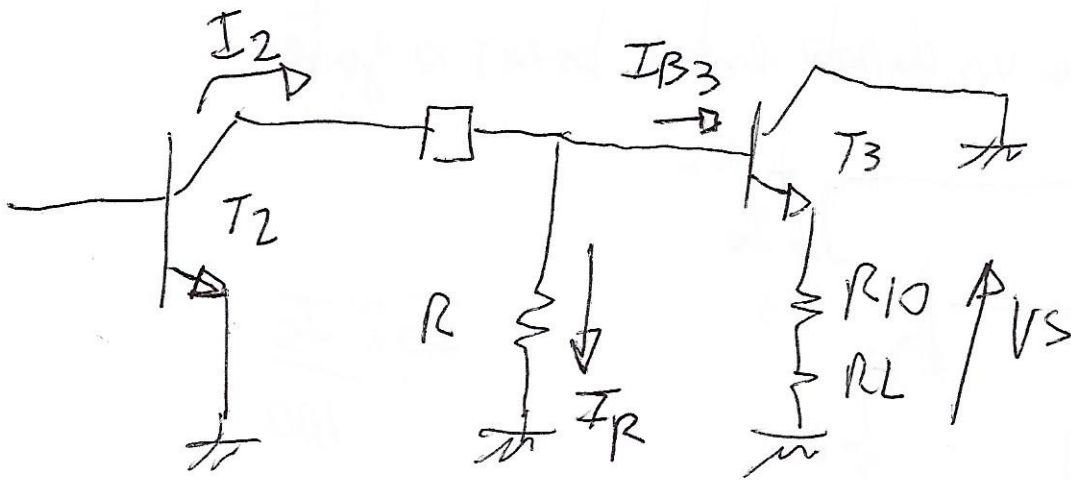
$$Z_0 \approx \frac{Z_\beta}{100}$$

En bipolar R_{10}, R_{11} PTC



Fuentes de alimentación



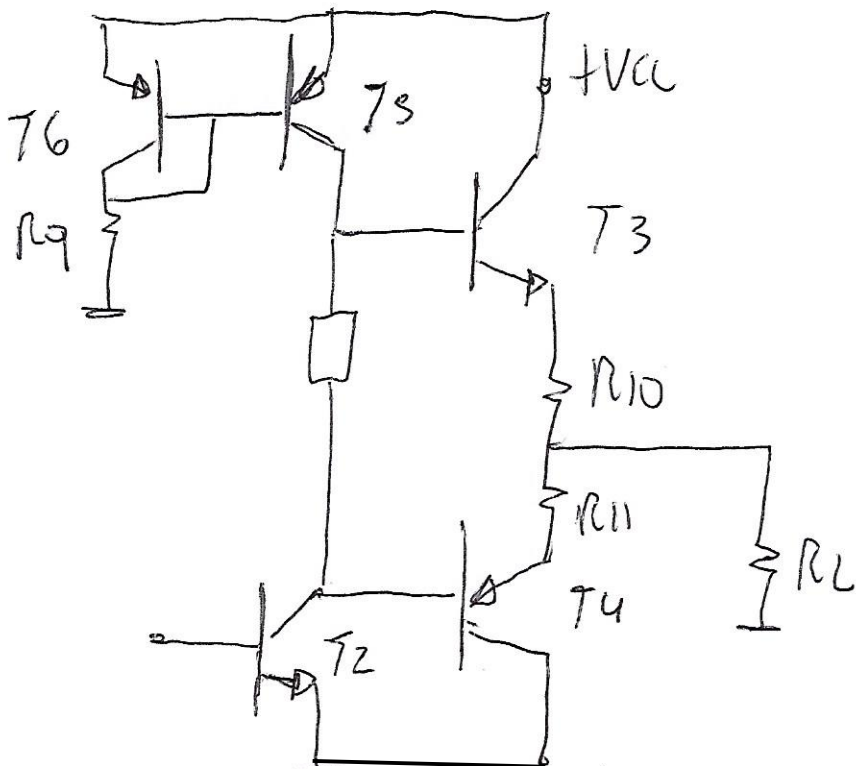


$$I_R = \frac{V_S + V_{BE\text{SAT}3}}{R}$$

$$I_{\text{UE}2} \cong \frac{V_{CC}}{R} \quad \text{como máximo } I_2 = I_{\text{UE}2}$$

$$\therefore I_R > I_{\text{UE}2}$$

(4)



$$P_{dT} = \frac{(\Delta, \Delta V_{cc})^2}{10 (R_{10} + 0,8 R_L)}$$

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