1 Electrònica

1.1 Díodes

$$V_p - V_n \geq V_\gamma \implies \text{PD}$$
$$\text{no PD} \implies \text{PI}$$
$$\text{PD} \implies I \neq 0$$
$$\text{PI} \implies I = 0$$
$$P_{cons} = \Delta V I$$
$$\text{PI} \quad \text{i} \quad \Delta V_{Z\text{co}} \geq V_Z \implies \text{regió Zener}$$

1.2 Transistors

1.2.1 NMOS

$$V_{GS} = V_G - V_S \qquad V_{DS} = V_D - V_S$$
$$V_{GS} \leq V_T \implies \text{Tall (OFF)} \implies I_D = 0$$
$$V_{GS} > V_T \implies \text{ON} \implies I_D \neq 0$$
$$V_{DS} < V_{GS} - V_T \implies \text{Regió òhmica}$$
$$V_{DS} < V_{GS} - V_T \iff V_{GD} > V_T$$
$$V_{DS} > V_{GS} - V_T \iff V_{GD} < V_T \implies \text{Regió de saturació}$$
$$V_{DS} > V_{GS} - V_T \iff V_{GD} < V_T$$

2 Ones