



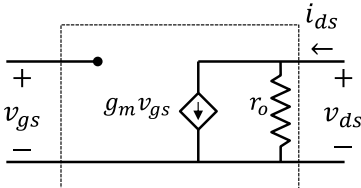


NMOSFET		PMOSFET	
			
E-nMOSFET $V_{TN} > 0$	D-nMOSFET $V_{TN} < 0$	E-pMOSFET $V_{TP} < 0$	D-pMOSFET $V_{TP} > 0$
Zona di saturazione			
$I_{DS} = \frac{k_n}{2} (V_{GS} - V_{TN})^2$ Condizioni: $V_{GS} > V_{TN}$ e $V_{DS} > V_{GS} - V_{TN}$		$I_{DS} = \frac{k_p}{2} (V_{GS} - V_{TP})^2$ Condizioni: $V_{GS} < V_{TP}$ e $V_{DS} < V_{GS} - V_{TP}$	
Zona lineare o triodo			
$I_{DS} = k_n \left(V_{GS} - V_{TN} - \frac{V_{DS}}{2} \right) V_{DS}$ Condizioni: $V_{GS} > V_{TN}$ e $V_{DS} < V_{GS} - V_{TN}$		$I_{DS} = k_p \left(V_{GS} - V_{TP} - \frac{V_{DS}}{2} \right) V_{DS}$ Condizioni: $V_{GS} < V_{TP}$ e $V_{DS} > V_{GS} - V_{TP}$	
Zona di interdizione			
$I_{DS} = 0$ Condizioni: $V_{GS} < V_{TN}$		$I_{DS} = 0$ Condizioni: $V_{GS} > V_{TP}$	
Modello ai piccoli segnali (in saturazione)			
			
$g_m = \frac{k_n (V_{GS} - V_{TN})}{2}$ $r_o = \frac{1}{k_n (V_{GS} - V_{TN})^2 \lambda_n}$		$g_m = -\frac{k_p (V_{GS} - V_{TP})}{2}$ $r_o = \frac{1}{k_p (V_{GS} - V_{TP})^2 \lambda_p}$	