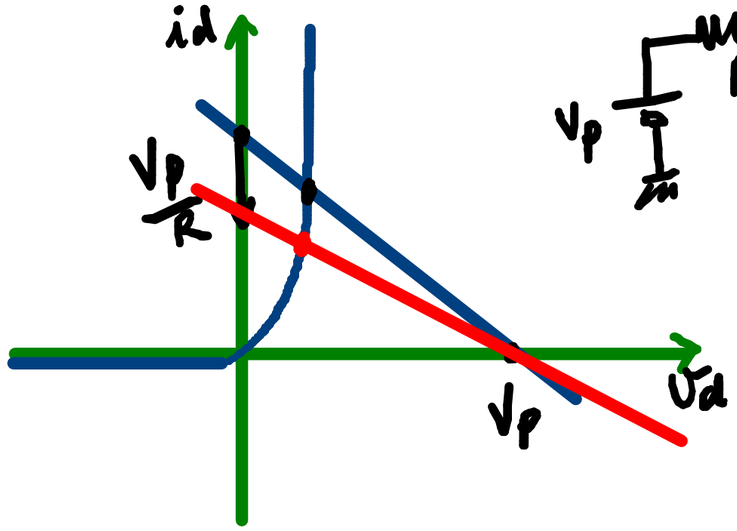
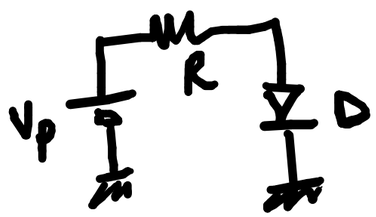
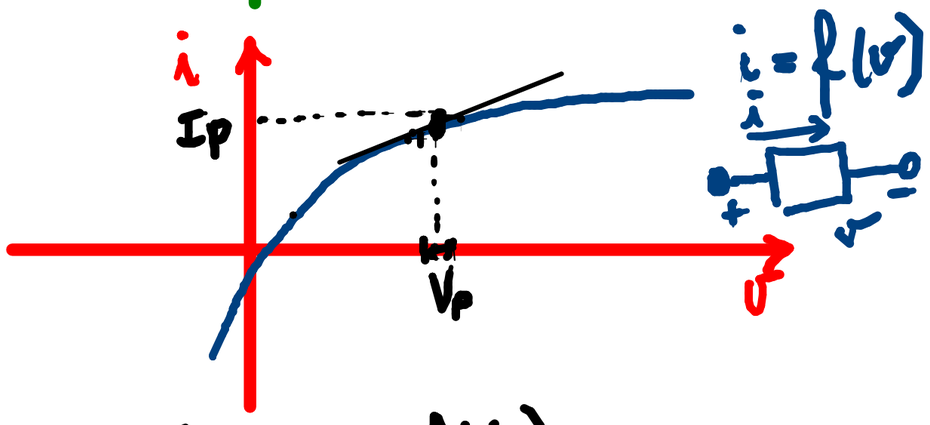



$V_p \Rightarrow I_p = f(V_p)$

$V_p \gg V_d$

$I_{p_{TDT}} = f(V_p + V_d)$

$I_{p_{TDT}} = \underbrace{f(V_p)}_{I_p} + \underbrace{\left.\frac{\delta f}{\delta V}\right|_{V_p} \cdot V_d}_{i_d}$

$i_d = \left.\frac{\delta f}{\delta V}\right|_{V_p} V_d$

$G(V_p)$

$i_d = I_s \left( e^{\frac{V_d}{\eta V_T}} - 1 \right)$

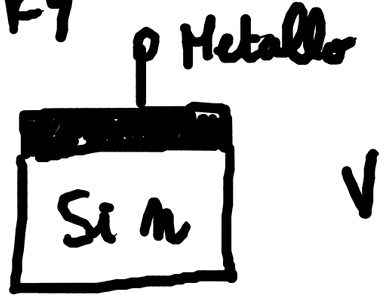
$i_d \simeq I_s e^{\frac{V_d}{\eta V_T}}$

$\frac{\delta i_d}{\delta V_d} = \left. \frac{I_s e^{\frac{V_d}{\eta V_T}}}{\eta V_T} \right|_{V_p} =$

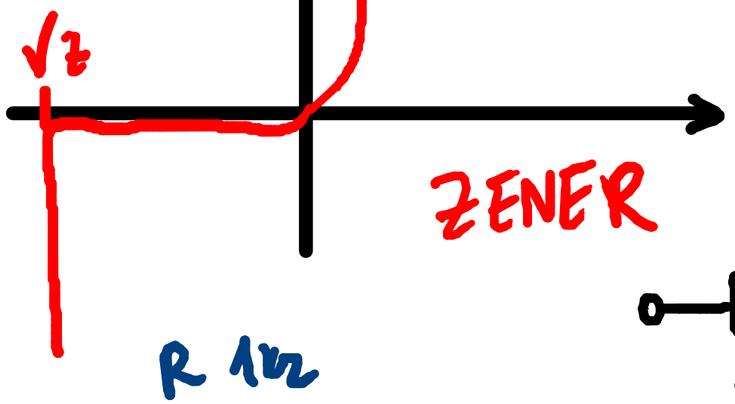
$= \frac{I_p}{\eta V_T} = \frac{1}{r_d}$

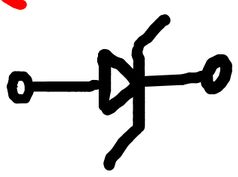
$r_d = \frac{\eta V_T}{I_p}$

SCHOTTKY




$V_\gamma \simeq 0{,}3V$



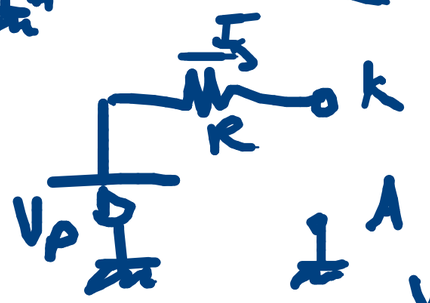






$H_p: D_z$ ON

$I = \frac{V_p - V_z}{R} = 1mA > 0$

$H_p: D_z$ OFF



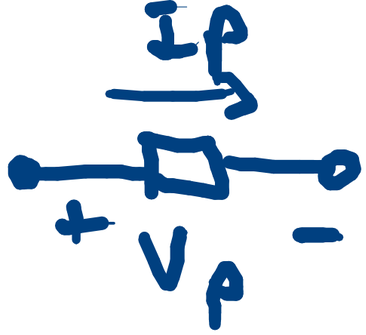

$V_{kA} < 0$

$V_A = 0$

$V_K = V_p - RI = V_p$

$V_{kA} > 0$ $V_{kA} = 6V$

$$P_D = V_p \cdot I_p$$



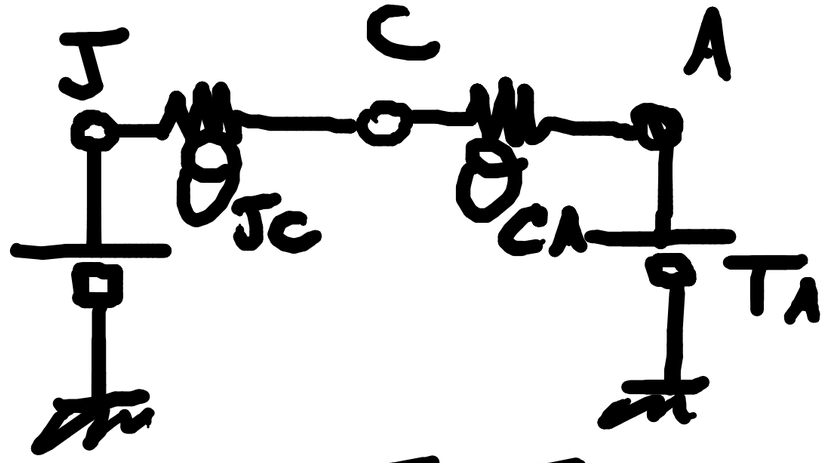

$$P_D = V_d \cdot I_d$$

$$V_d = V_\gamma + r_d I_D$$

$$P_D = V_\gamma I_D + r_d I_D^2$$

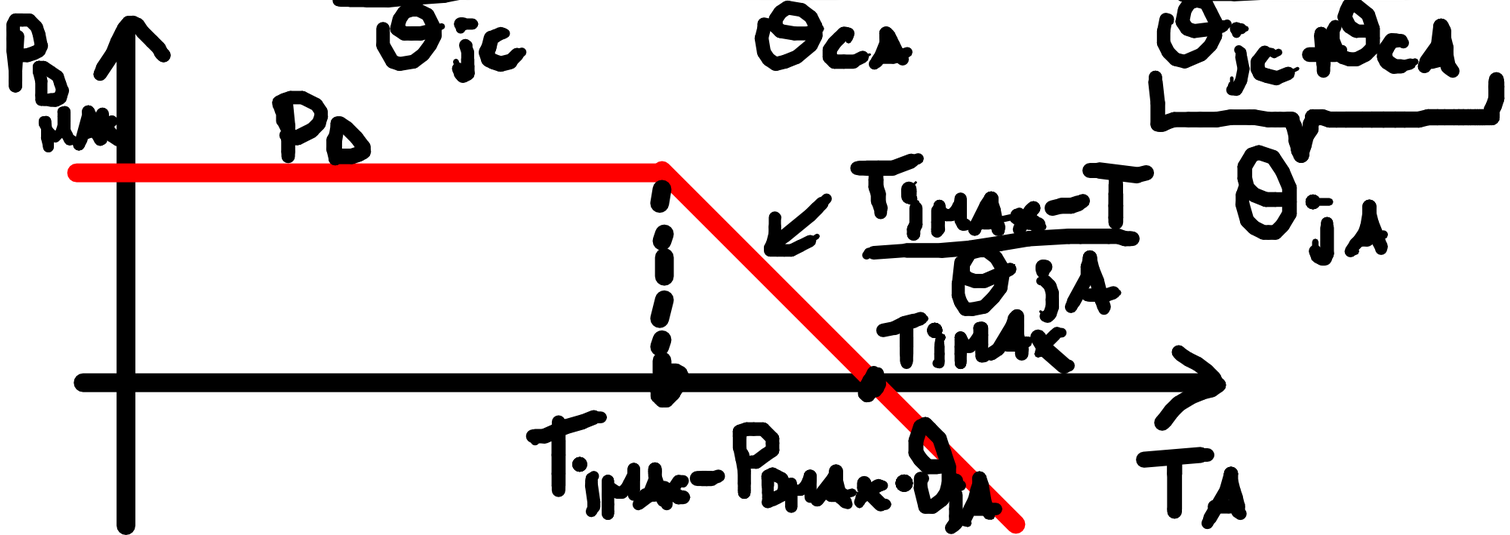
$$T \rightarrow V$$

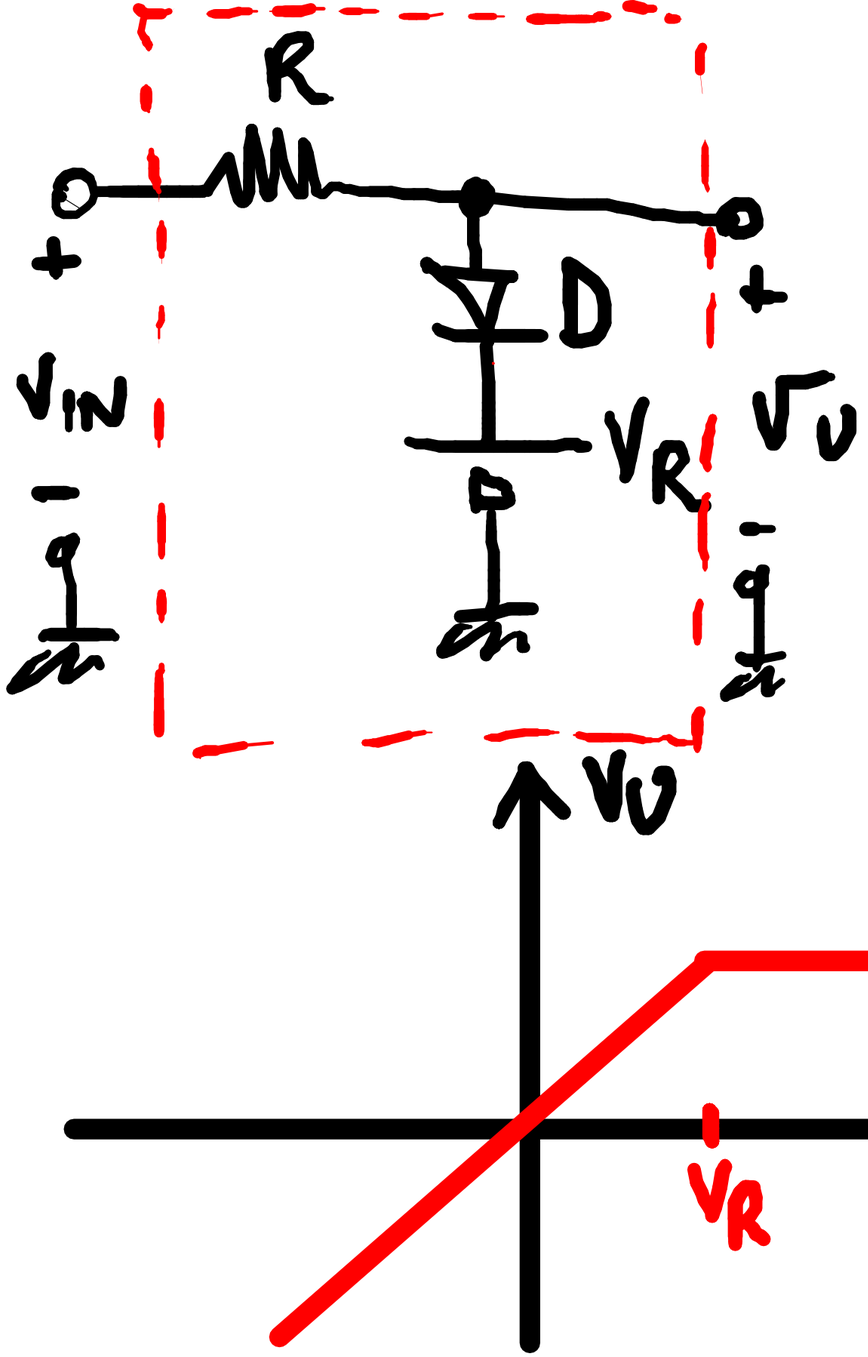
$$F \rightarrow I$$

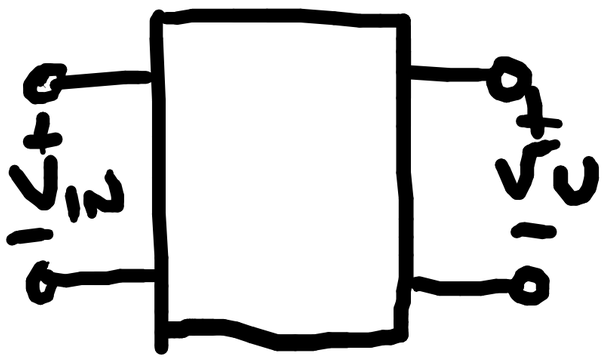



$$P_D = \frac{T_j - T_C}{\theta_{jC}} = \frac{T_C - T_A}{\theta_{CA}} = \frac{T_j - T_A}{\theta_{jC} + \theta_{CA}}$$

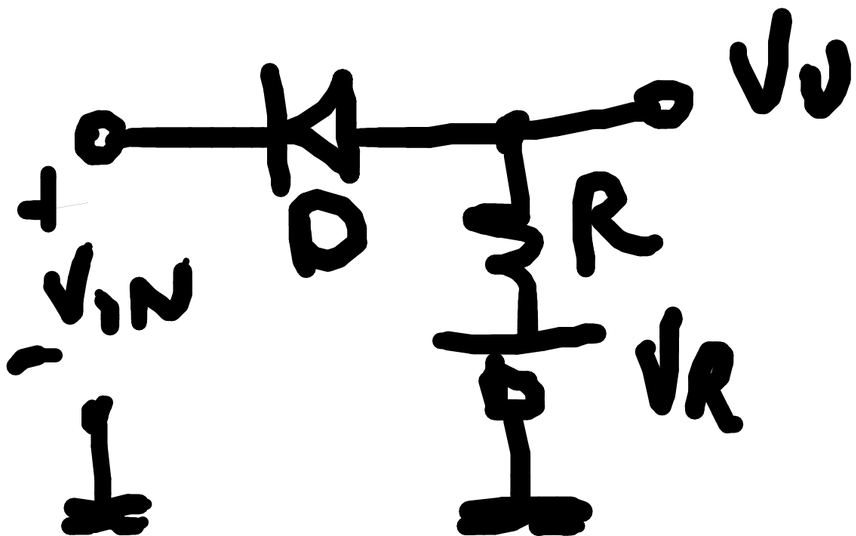
$$\theta_{jA}$$




R
D
+
$V_{IN}$
−
+
$V_R$
−
+
$V_U$
−
$V_U$


+
$V_{IN}$
−
+
$V_U$
−


$V_R$
$V_{IN}$


$V_U$
D
R
+
$V_{IN}$
−
$V_R$