

off state:  $r_2, r_3 = 0$

on state:  $r_2 = r_{\text{gate}}; r_3 = r_{\text{channel}}$

$r_{\text{gate}} = 100 \text{ ohm}$

$r_{\text{channel}} = 5 \text{ kohm}$

$r_1 = 100 \text{ mohm}$

$r_4 = 5 \text{ ohm}$

$r_a = r_1 + r_2$

$r_b = r_3 + r_4$

$I_{\text{gate\_on}} = 3 \text{ }\mu\text{A}$

$I_{\text{gate\_off}} = 300 \text{ nA}$

$I_{\text{channel\_on}} = 16 \text{ }\mu\text{A}$

$I_{\text{channel\_off}} = 3.2 \text{ }\mu\text{A}$

$I_b = 20 \text{ }\mu\text{A}$

$L_1 = 200 \text{ pH}$

$L_2 = 200 \text{ pH}$

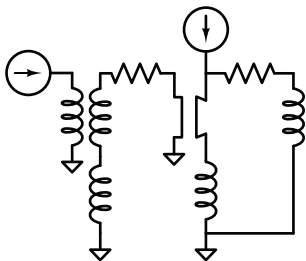
$L_3 = 400 \text{ pH}$

$L_4 = 10 \text{ pH}$

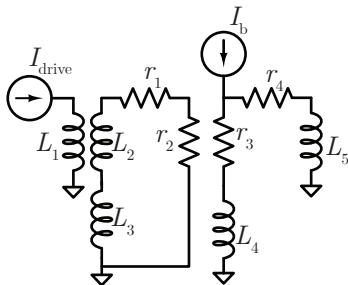
$L_5 = 100 \text{ nH}$

$L_a = L_2 + L_3 + L_4$

$L_b = L_4 + L_5$



$=$



off state:  $r_2, r_3 = 0$

on state:  $r_2 = r_{gate}; r_3 = r_{channel}$

$r_{gate} = 100 \text{ ohm}$

$r_{channel} = 5 \text{ kohm}$

$r_1 = 12 \text{ mohm}$

$r_4 = 2 \text{ ohm}$

$r_a = r_1 + r_2$

$r_b = r_3 + r_4$

$I_{gate\_on} = 3 \text{ }\mu\text{A}$

$I_{gate\_off} = 300 \text{ nA}$

$I_{channel\_on} = 16 \text{ }\mu\text{A}$

$I_{channel\_off} = 4 \text{ }\mu\text{A}$

$I_b = 20 \text{ }\mu\text{A}$

$L_1 = 200 \text{ pH}$

$L_2 = 200 \text{ pH}$

$L_3 = 400 \text{ pH}$

$L_4 = 10 \text{ pH}$

$L_5 = 100 \text{ nH}$

$L_a = L_2 + L_3 + L_4$

$L_b = L_4 + L_5$

(b)

