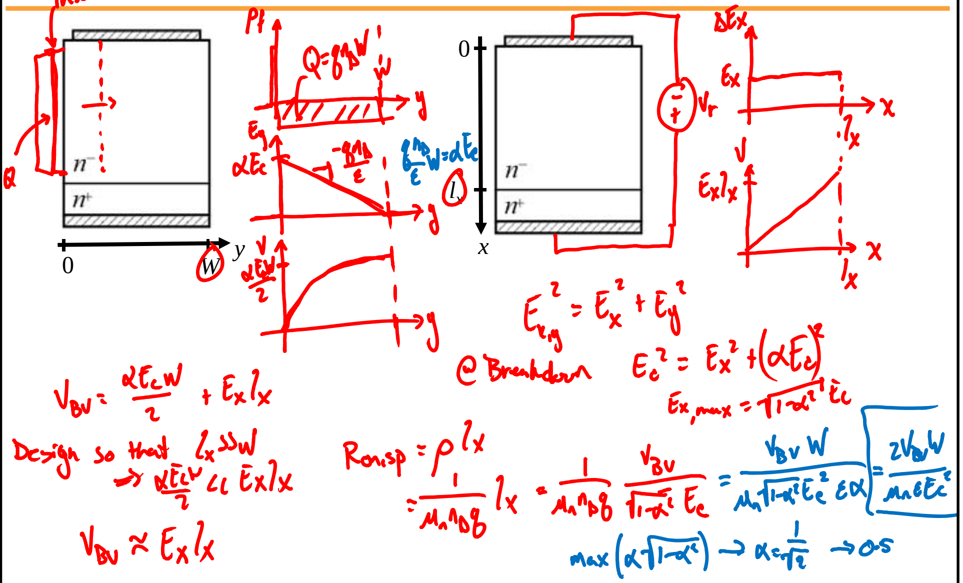
2-D Electric Field



T. Fujihira, "Theory of Semiconductor Superjunction Devices"

SJ MOSFET Experimental Potential

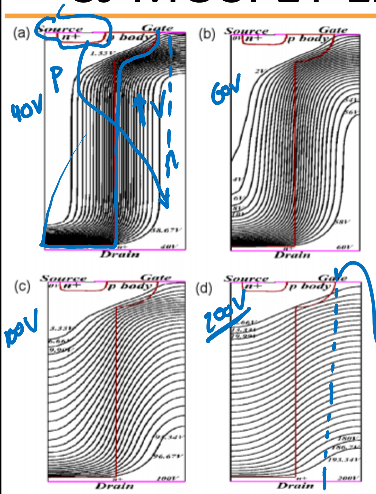
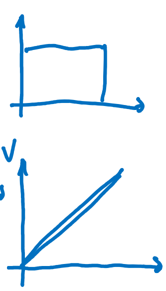
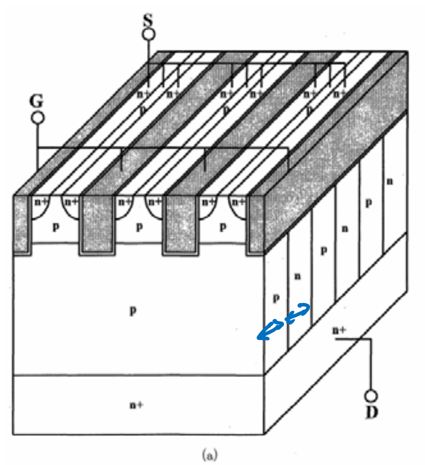


Fig. 3. Potential contours in the CoolMOS structure for (a) $V_{DS} = 40$ V, (b) $V_{DS} = 60$ V, (c) $V_{DS} = 100$ V, and (d) $V_{DS} = 200$ V for $V_{GS} = 0$ V.



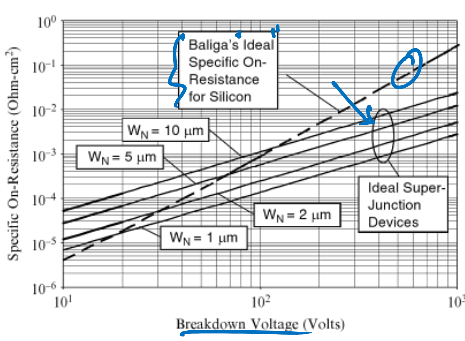
P. Kondekar et al., "Study of the Degradation of the Breakdown Voltage of a Super-Junction Power MOSFET due to Charge Imbalance"

Surpassing “Ideal” $R_{on,sp}$



T. Fujihira, “Theory of Semiconductor Superjunction Devices”

Charge Coupled FOM



Baliga, B J, “Advanced Power MOSFET Concepts”