

Fabian Pease Quals Questions 2015

- 1) Sketch the output (I_d/V_d) characteristics of a typical MOSFET.
- 2) TO maximize power in a load resistor how should its value compare with that of the internal resistance of a power source?
- 3) Your MOSFET feeds a long microstrip electrode 1 micron wide on 250nm SiO_2 on a Si substrate. Estimate its characteristic impedance. How well does this value match the output resistance of your MOSFET? Any suggestions on how to overcome this mismatch?