

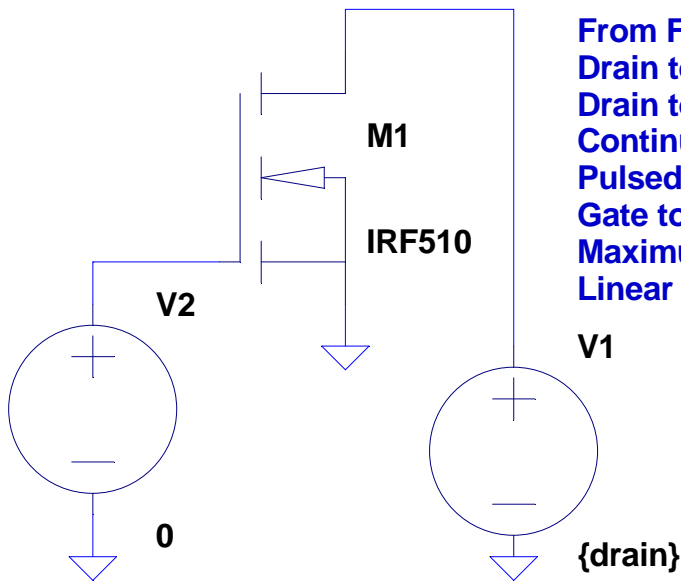
**TRANSCEIVER CW F8EOZ - IRF510 CURVE - V 24/02/2013 11:05**

**N-Channel enhancement mode silicon gate power field effect transistor**

**Transfer characteristic curve: Drain current vs Gate Source current**

**$I_d = f(V_{gs} \mid V_{ds} = \text{constant}, \text{slope} = g)$**

**The MOSFET transfer characteristic is plot of  $I_D$  versus  $V_{GS}$  at constant  $V_{DS}$  in the saturation region.**



**From Fairchild datasheet...**

**Drain to Source Voltage  $V_{DS}$  100 V**

**Drain to Gate Voltage ( $R_{GS} = 20k$ )  $V_{DGR}$  100 V**

**Continuous Drain Current  $I_D$  5.6 A  $T_C = 100^\circ\text{C}$   $I_D$  4A**

**Pulsed Drain Current  $I_{DM}$  20 A**

**Gate to Source Voltage  $V_{GS}$   $\pm 20$  V**

**Maximum Power Dissipation  $P_D$  43 W**

**Linear Derating Factor 0.29  $\text{W}/^\circ$**

**.dc V2 3 8V 1**

**.options plotwinsize=0**

**.PARAM drain = 13.8**