

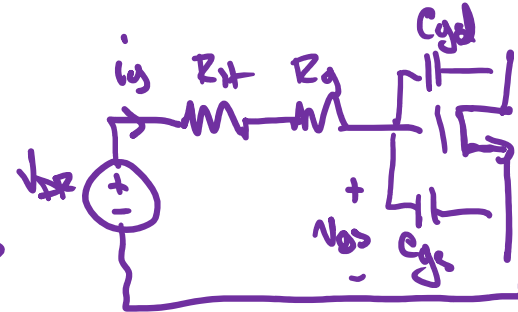
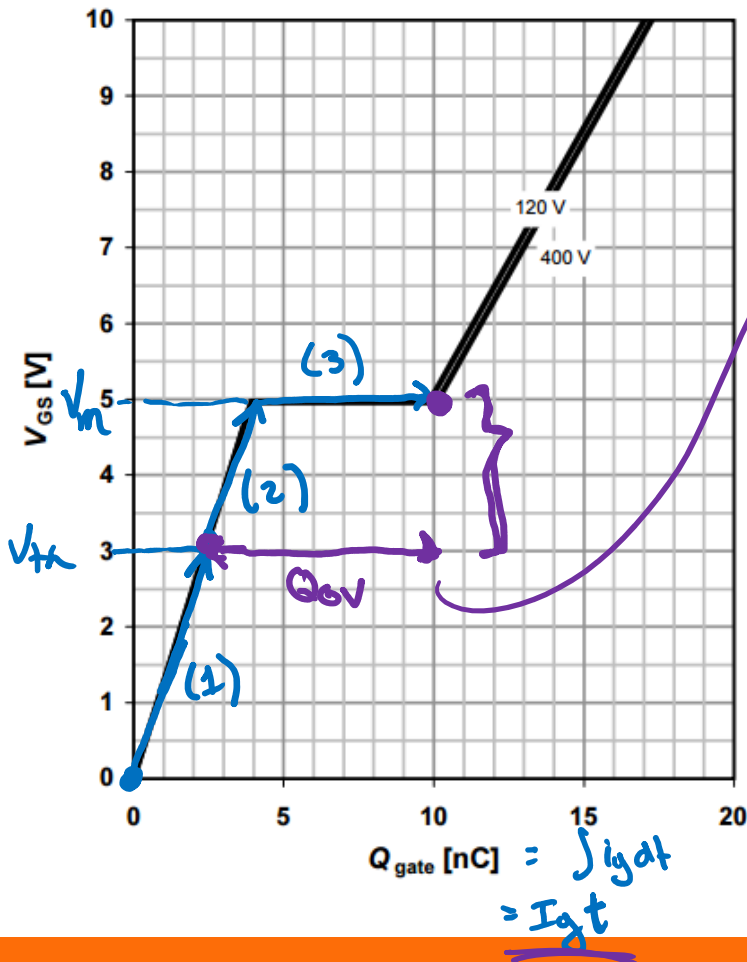
Overlap Time

9 Typ. gate charge

$V_{GS} = f(Q_{gate}); I_D = 5.2 \text{ A pulsed}$

parameter: V_{DD}

Gate threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 0.34 \text{ mA}$	2.5	3	3.5
Gate resistance	R_G	$f = 1 \text{ MHz, open drain}$	-	1.8	- Ω

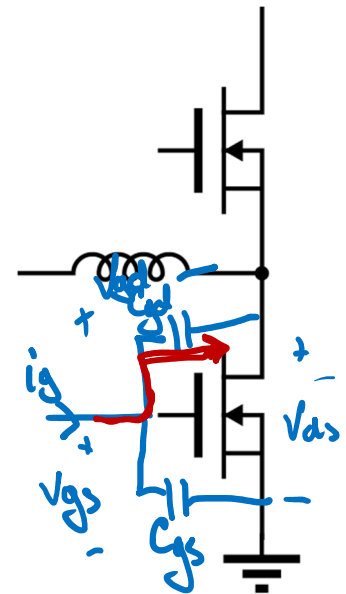


$$I_g = \frac{V_{DD} - V_{GS}}{R_H + R_G}$$

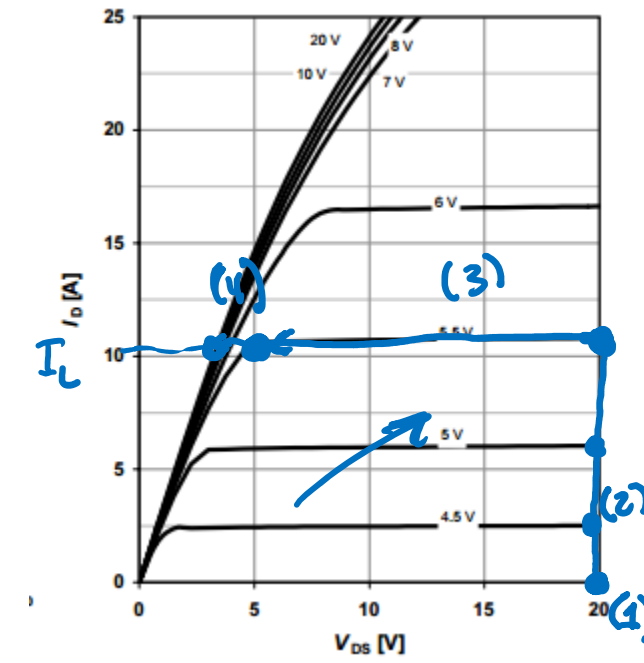
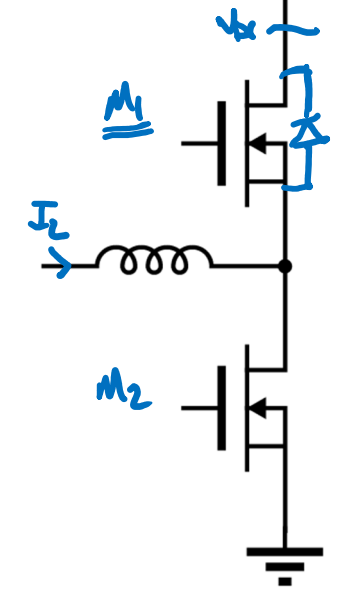
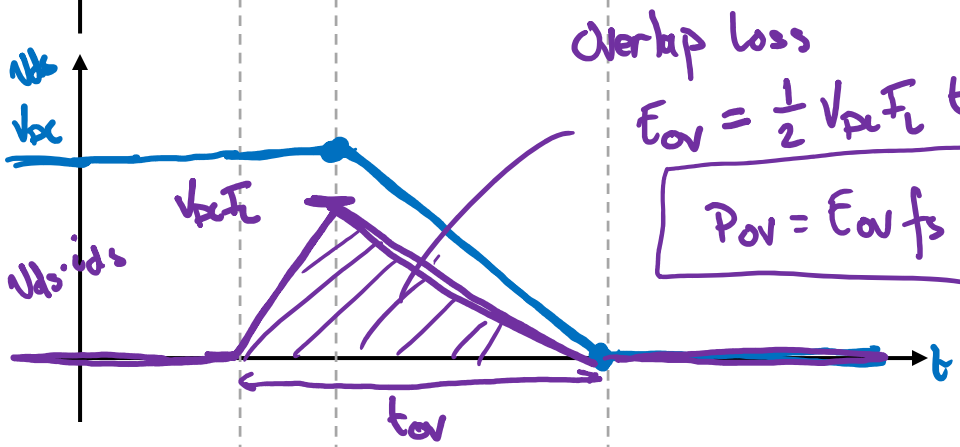
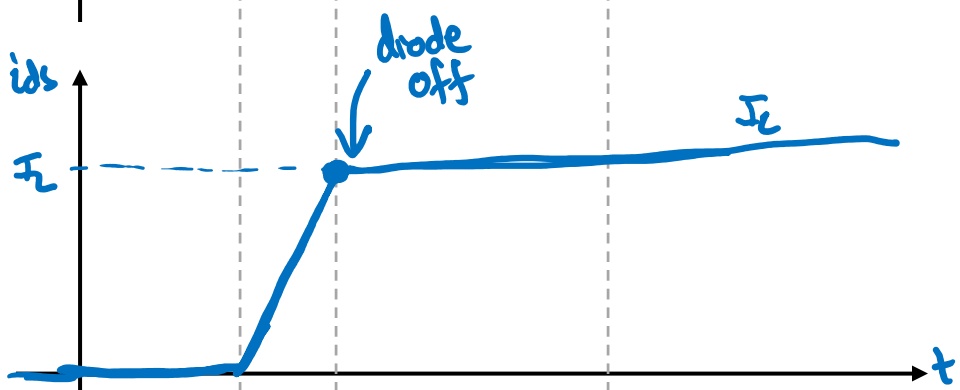
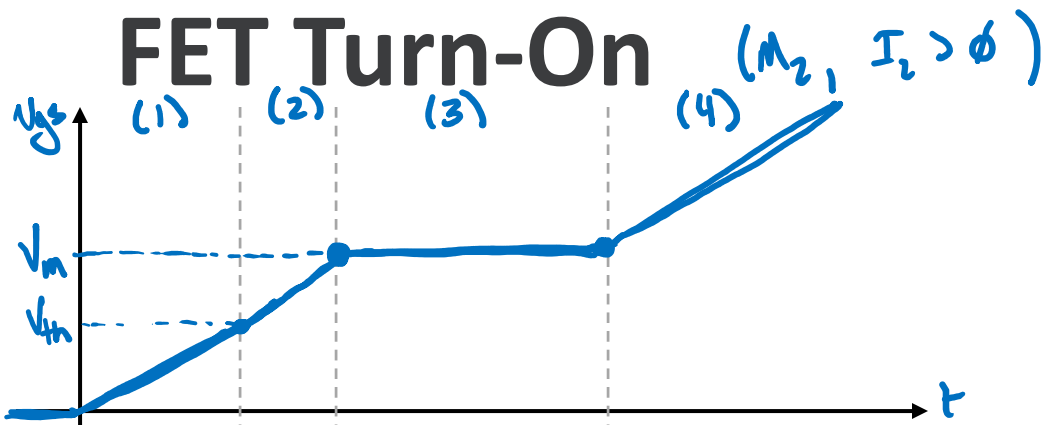
during t_{ov}

$$I_{g,ov} \approx \frac{V_{DD} - V_{th}}{R_H + R_G} = \text{const}$$

$$t_{ov} = \frac{Q_{ov}}{I_{g,ov}}$$



FET Turn-On



Device Transconductance

$$i_{ds} \approx g_{fs} (V_{gs} - V_{th})$$

End of (2) : $\frac{I_c}{g_{fs}} = V_m - V_{th}$

