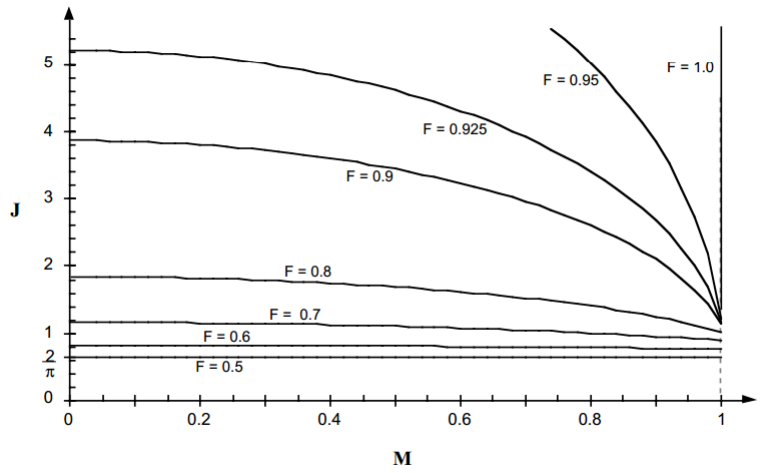
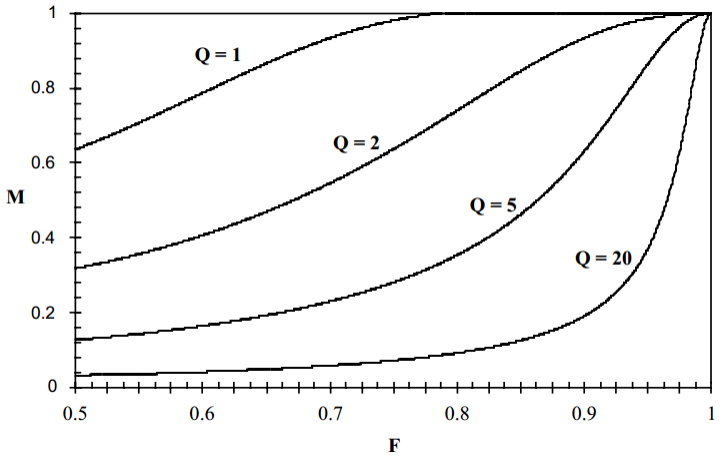
Output Plane

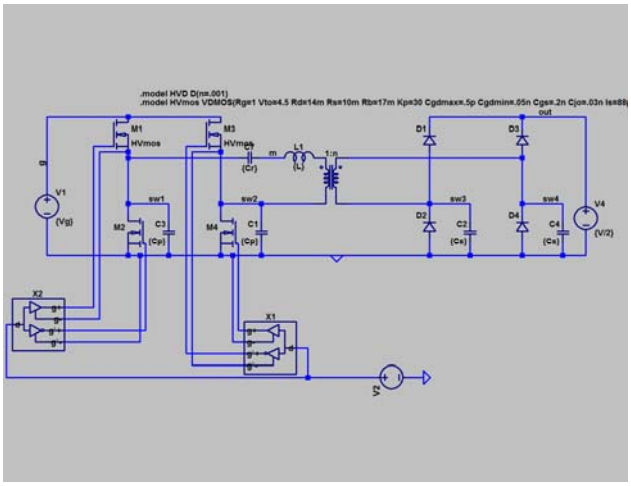


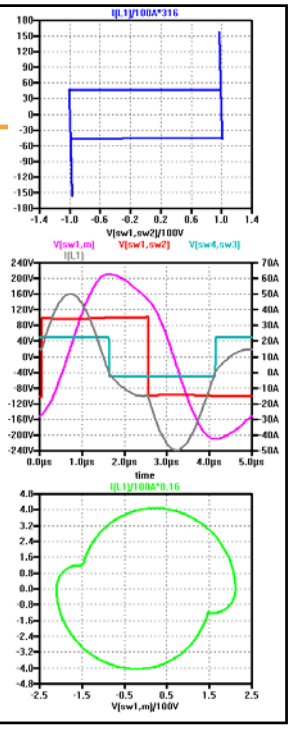
Frequency Modulation

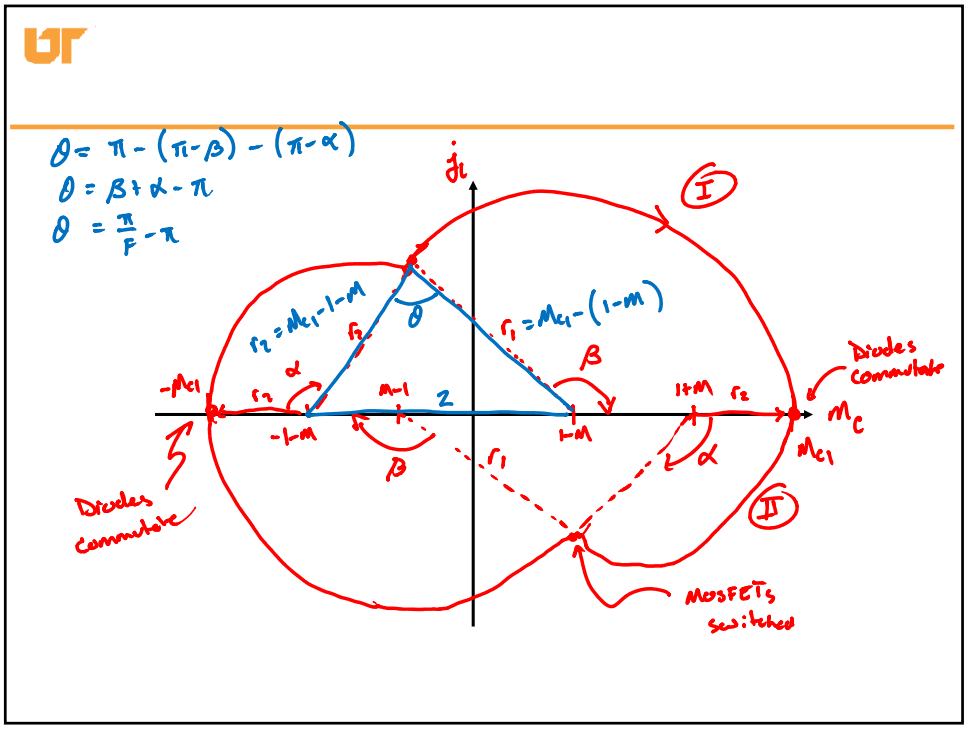


Issues with k=1 CCM

M = ½
F = 0.69

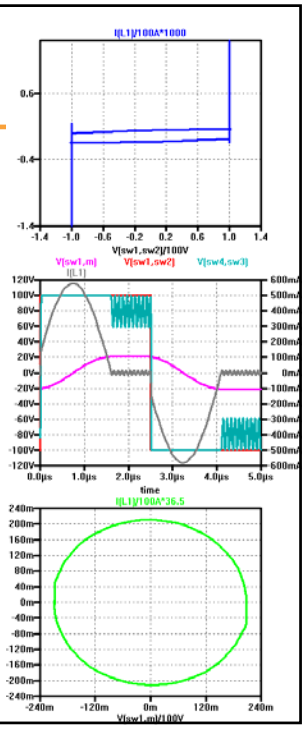






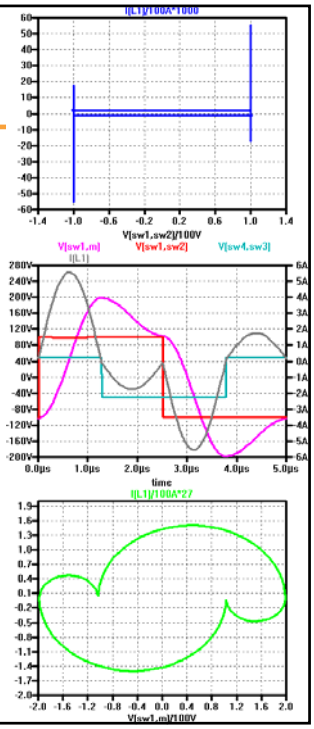
Mode Boundary

M = 1
F = 0.7



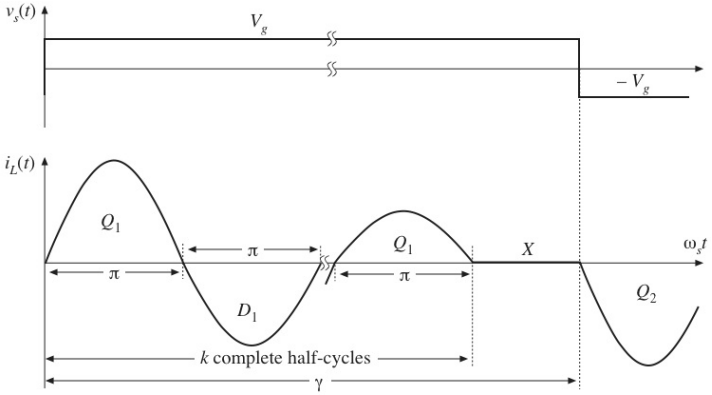
Mode Boundary

M = ½
F = ½

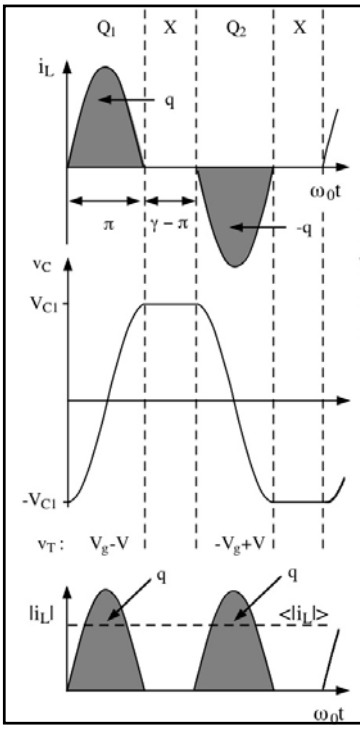


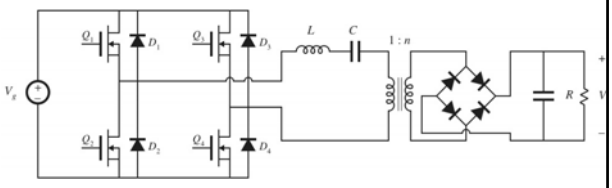
Discontinuous Conduction Modes

•In the "type *k*" discontinuous conduction mode, the tank rings through *k* complete half cycles during each half switching period. The output diode rectifiers then become reverse-biased, and remain off until the input bridge transistors switch to initiate the next half switching period.

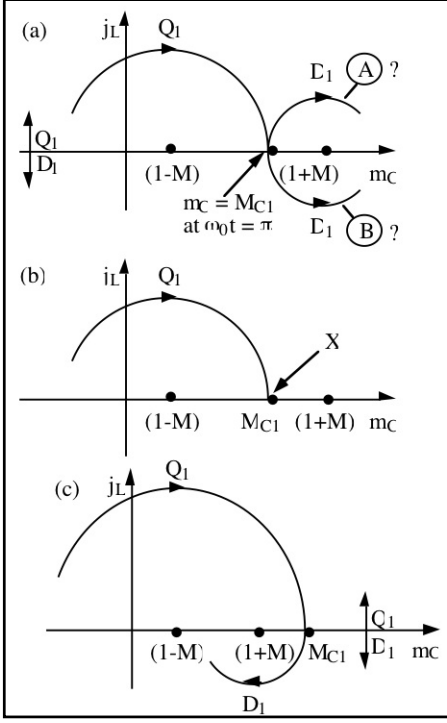


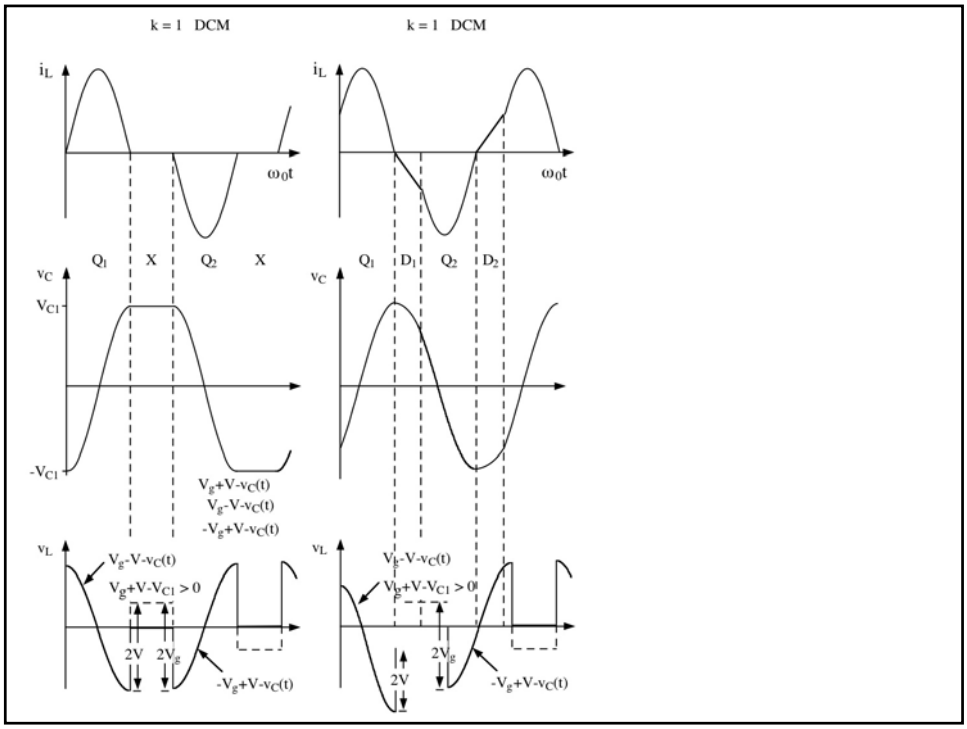
The *k* = 1 DCM



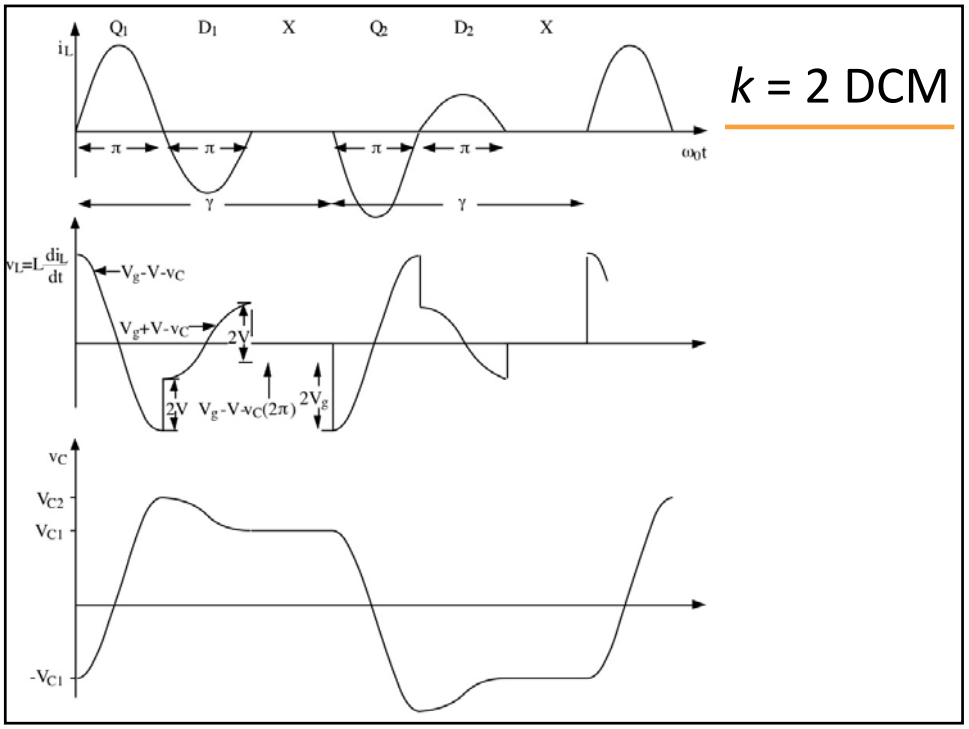


Why DCM Occurs





Summary of results *k* = 1 DCM



k = 2 DCM

State Plane Diagram *k* = 2 DCM