

Lecture 14

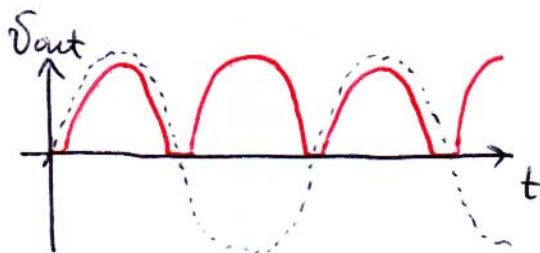
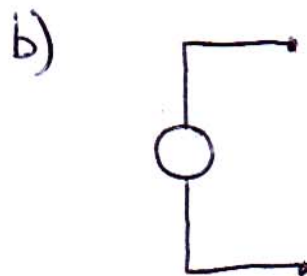
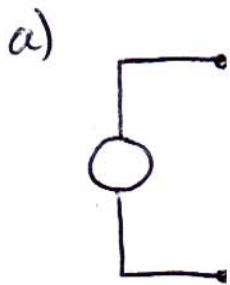
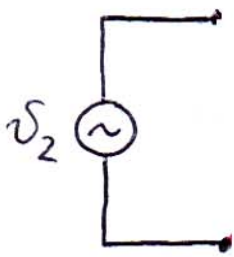
Diode Applications (contd.)

① rectifiers

recall filter capacitor

ripple: $\frac{dV}{dt} = \frac{I}{C}$,

full wave rectifier



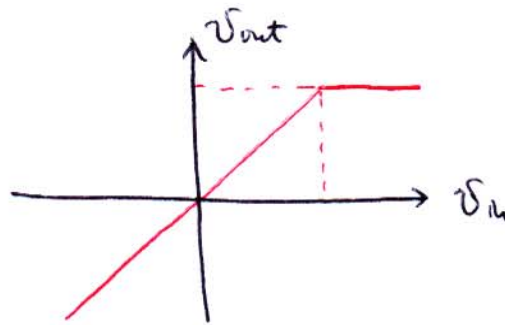
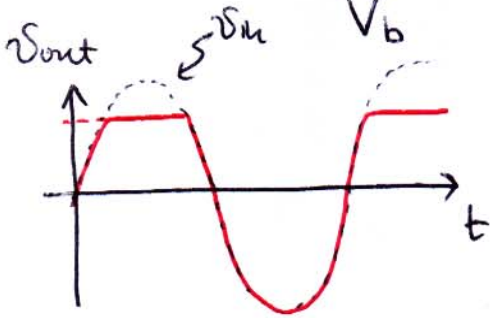
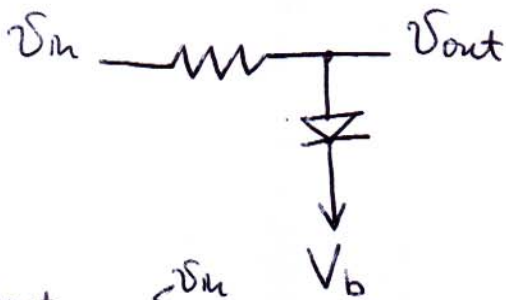
Pros: -
-

② Zener voltage reference

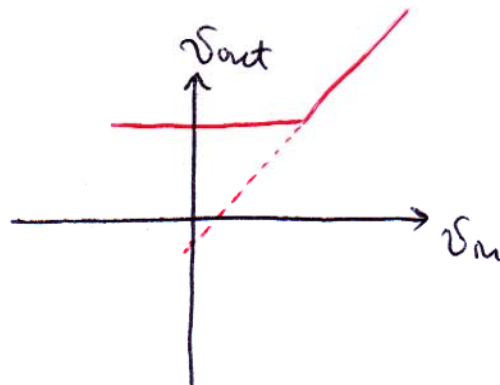
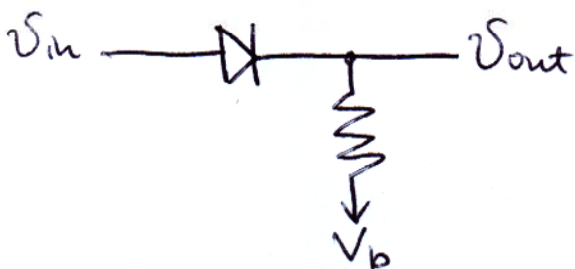
②

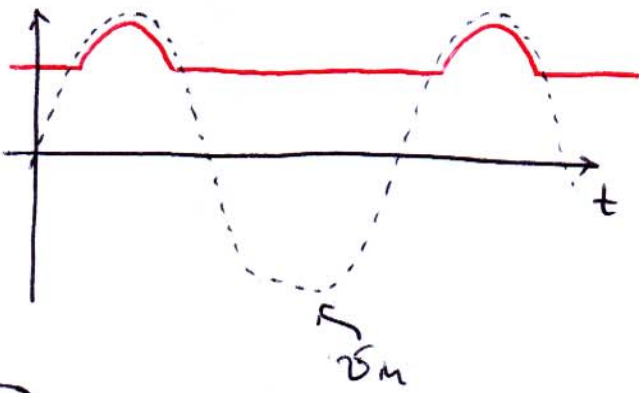


③ Clipping circuit

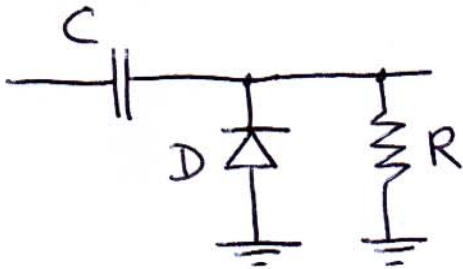


④ Pickoff circuit



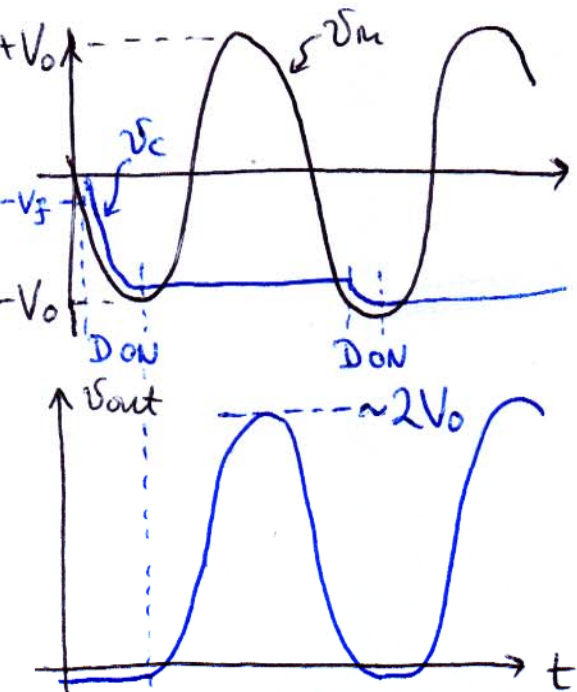


5 Voltage doubler



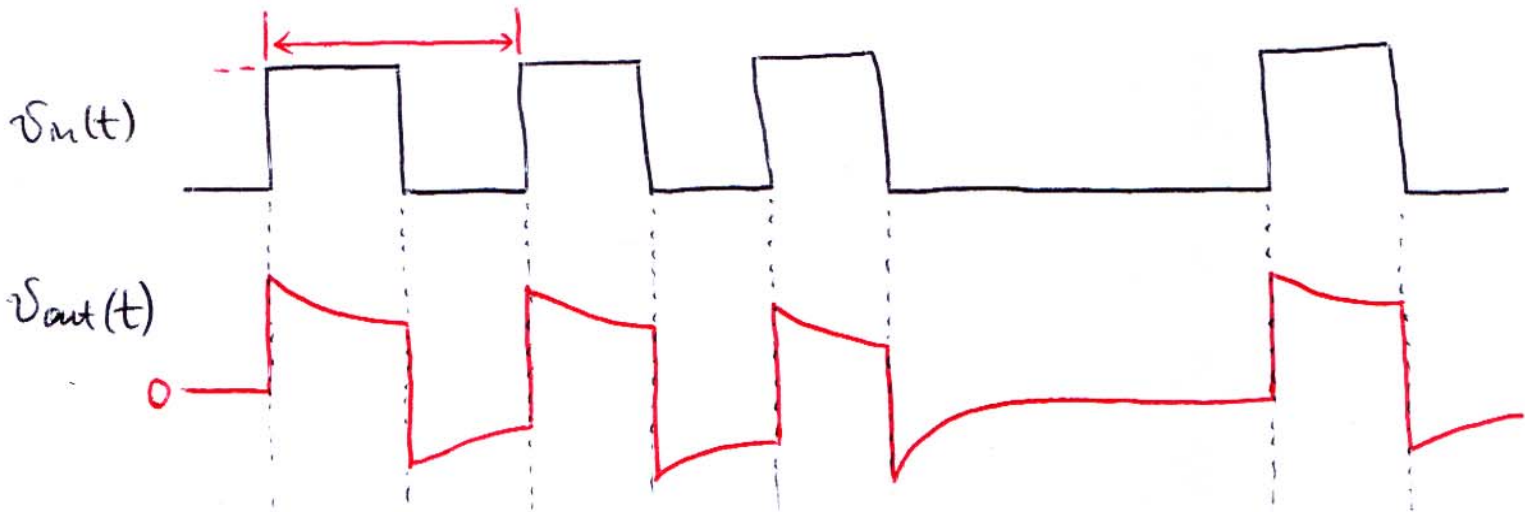
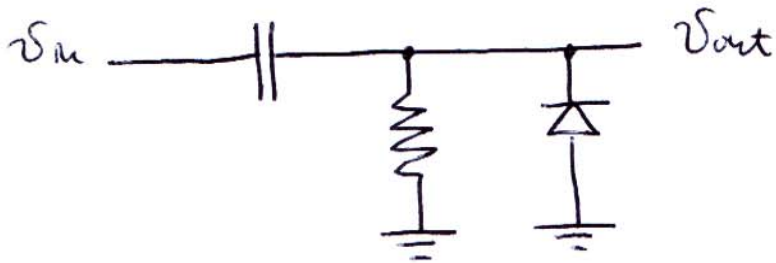
$$v_m - v_c < -V_f$$

$$v_m - v_c > -V_f$$



⑥ DC restoration circuit

④



Problem :

