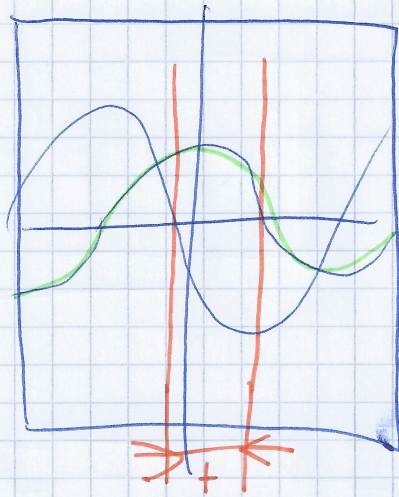
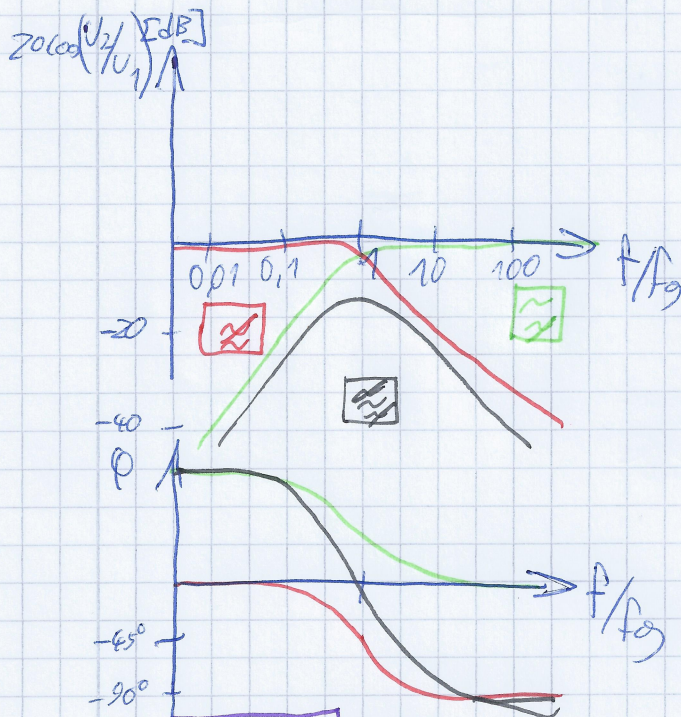


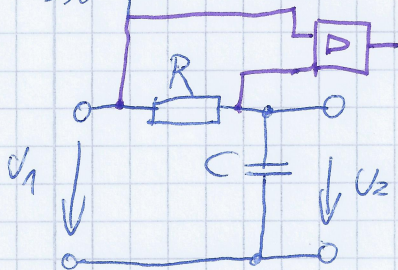
III/5 passive Filter (Bodediagramm)



$$\varphi = \frac{-+}{T} \cdot 360^\circ$$



$$20 \cdot \log\left(\frac{U_2}{U_1}\right) [dB]$$



$$U \frac{U_2}{U_1} = \frac{\frac{1}{j\omega C}}{R + \frac{1}{j\omega C}} = \frac{1}{1 + j\omega RC}$$

$$Re=Im: 1 = \omega RC \Rightarrow \omega_0 = \frac{1}{RC} \quad f_0 = \frac{1}{2\pi RC}$$

