



1. Derive the transfer function  $v_o(s)/v_i(s)$ .
2. Design for  $Q = 5$  and  $\omega_0 = 10\text{kr/s}$ . Let  $C_2 = .1\mu\text{F}$ . Let  $R_1=R_2$ .
3. Record frequency response data for the filter and determine  $Q$ ,  $\omega_0$ , and gain max.
4. From part 3, Plot frequency response.
5. Repeat above steps for  $Q = 1$  and  $\omega_0$  your choice.
6. Repeat above steps for  $Q = 10$  and  $\omega_0$  your choice.
7. Compare experimental with theoretical results.