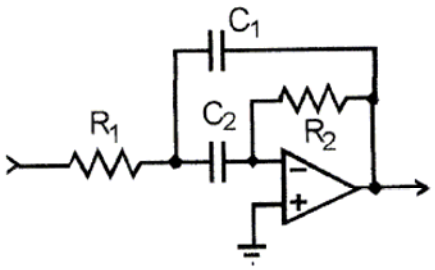
14-23 Bandpass with $\omega_0 := 5000$ rad/s and $B := 500$ rad/s

Use equal capacitor design



By definition: $\zeta := \frac{B}{2 \cdot \omega_0}$ or $\zeta = 0.05$

Use equal capacitors Let $R_2 := 10^5\ \Omega$ then

$R_1 := \zeta^2 \cdot R_2$ $C := \frac{1}{\omega_0 \cdot \sqrt{R_1 \cdot R_2}}$ $C = 4 \times 10^{-8}$ F

$R_1 = 250\ \Omega$ $R_2 = 1 \times 10^5\ \Omega$ $C_1 := C$ $C_2 := C$ $C_1 = 4 \times 10^{-8}$ F $C_2 = 4 \times 10^{-8}$ F