
Figure 1: Op-amp in unity-gain configuration. The positive supply voltage has a DC component $V_{DD}$ and a signal component $v_{dd}$.

Figure 1 shows an op-amp in unity-gain configuration, with zero input voltage. The positive supply voltage has a signal component $v_{dd}$.

(a) Show that the op-amp power supply rejection ratio PSRR$^+$ can be found in the circuit of Fig. 1 by measuring the gain $v_o/v_{dd}$ at frequencies where the open-loop differential mode gain $A_o$ is much larger than 1.

(b) Apply the approach of part (a) to measure PSRR$^+$ for the LM6642 op-amp example. Setup an LTspice simulation and determine PSRR$^+$. Turn in a copy of the simulation schematic corresponding to the circuit of Fig. 1, and describe how you found PSRR$^+$. Compare the result to the value reported in the LM6642 data sheet.