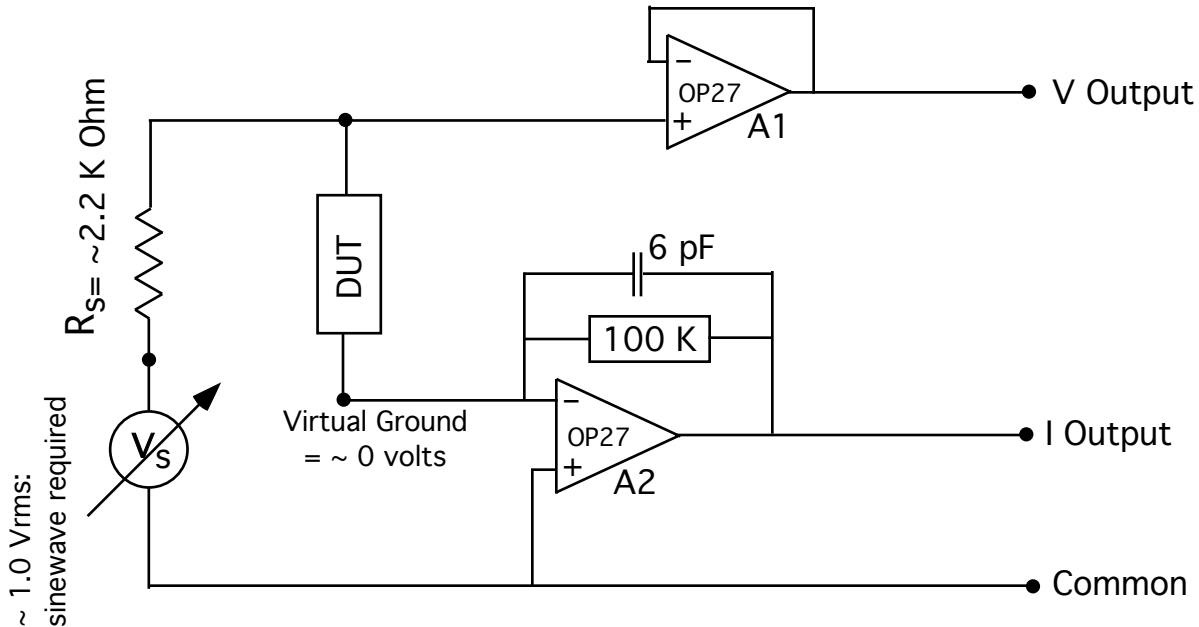


# I-V Buffer Circuit

October 2003 Circuit



V Output is a buffered replica of the voltage across the Device Under Test (DUT). A1 is the voltage follower.

I Output is a voltage equal to 100,000 times the current through the DUT. A2 is the transimpedance amplifier.

The exact value of  $R_s$  is not critical, and values from 1K0 to 1M0 have been used.

The 100K0 feedback resistor and 6p0 feedback capacitor roll the current response off at  $\sim 260$  KHz. Circuit has been used up to 20 KHz, but will go higher.

The OP27 opamps are powered by a pair of 9-volt batteries. Power leads, switches, and bypass capacitors are all necessary, but not shown above.