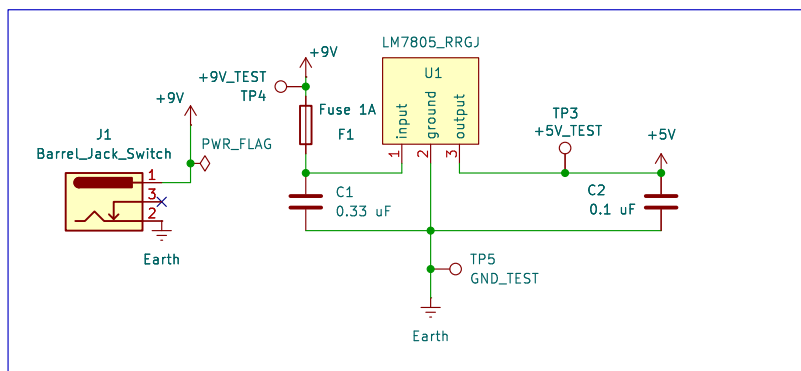


The diagram illustrates a Wheatstone bridge circuit. The bridge consists of four resistors: R_1 (5.6k), R_2 (10k), R_3 (10k), and R_4 (10k). A +5V supply is connected to the top of R_1 and R_2 . The bottom of R_2 and R_3 is connected to Earth. The output of the bridge, labeled 'A', is taken from the node between R_1 and R_2 . This output is connected to the non-inverting input (VIN+) of the MCP6002 op-amp. The inverting input (VIN-) is connected to Earth. The op-amp is configured as a voltage follower, with its output (VOUTA) connected back to its non-inverting input. The op-amp's power supply is connected to +5V (VDD) and Earth (VSS). A GP2Y0A21YK0F sensor (S1) is connected to the +5V supply and Earth. The sensor's output (Vo) is connected to the non-inverting input of the op-amp. The op-amp's output (VOUTA) is connected to the output of the sensor (Vo). The sensor's internal circuitry is represented by a box with pins for GND, VCC, and Vo. The op-amp is represented by a box with pins for VOUTA, VIN-, VIN+, VSS, VOUTB, VINB-, VINB+, and VDD. The sensor is represented by a box with pins for GND, VCC, and Vo. The circuit is powered by a +5V supply and Earth.

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