

Simple single supply photometer (from Horowitz and Hill, *The Art of Electronics*, 2nd ed.)

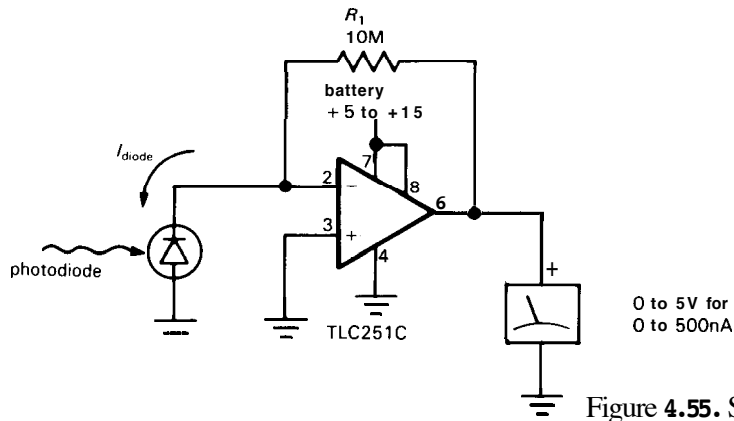


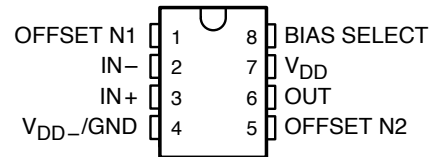
Figure 4.55. Single-supply photometer.

**TLC251, TLC251A, TLC251B, TLC251Y**  
**LinCMOS™ PROGRAMMABLE**  
**LOW-POWER OPERATIONAL AMPLIFIERS**

SLOS001F – JULY 1983 – REVISED MARCH 2001

- **Wide Range of Supply Voltages**  
1.4-V to 16-V
- **True Single-Supply Operation**
- **Common-Mode Input Voltage Range**  
Includes the Negative Rail
- **Low Noise . . . 30 nV/√Hz Typ at 1-kHz**  
(High Bias)
- **ESD Protection Exceeds 2000 V Per**  
MIL-STD-883C, Method 3015.1

**D OR P PACKAGE**  
(TOP VIEW)



symbol

The TLC251 is an inexpensive micropower (10µA supply current) CMOS op-amp with input and output swings to the negative rail. Its low input current (1pA, typical, at room temperature) makes it good for low-current applications like this.

