## μ**A771**INSTRUMENTATION AMPLIFIER

## μ**A772**HIGH SLEW RATE OPERATIONAL AMPLIFIER

**GENERAL DESCRIPTION** — The μA771 is a true Instrumentation Amplifier with an internally closed feedback loop determining the device gain. The μA771 instrumentation amplifier is distinguished from operational amplifiers with external resistor feedback because the input terminals are totally uncommitted and need be connected only to the signal source. The μA771 also features very high input impedance, very low bias and offset currents, low offset drifts, low noise and high common mode and power supply rejection. The addition of a few external components enables the user to "add-on" a derived common mode voltage follower for driving shielded input lines, if desired. Typical applications include strain gauge, transducer and transconductance amplifiers, physiological (biomedical) probes, and thermocouple preamplifiers.

- GAIN DETERMINED BY INTERNALLY CLOSED FEEDBACK LOOP
- VERY HIGH INPUT IMPEDANCE
- LOW OFFSET DRIFTS
- LOW NOISE
- HIGH COMMON MODE AND POWER SUPPLY REJECTION
- VERY LOW BIAS AND OFFSET CURRENTS
- VERY SIMPLE GAIN SETTING AND ADJUSTMENT

CONNECTION DIAGRAM
14-LEAD DIP
(TOP VIEW)
PACKAGE OUTLINE 6A

OUTPUT 1

V+ 2

I3 OFFSET ADJUST

I2 REFERENCE

I1 RO

RG 5

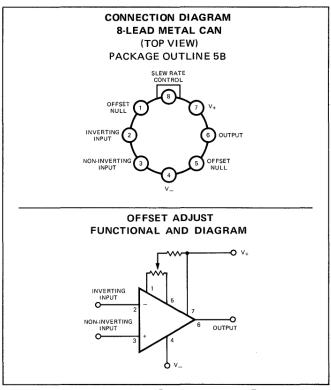
(+) INPUT 6

9 RO

8 V\_

**GENERAL DESCRIPTION** — The  $\mu$ A772 is a monolithic High Slew Rate Operational Amplifier, constructed using the Fairchild Planar\* epitaxial process. The  $\mu$ A772 features high slew rate and fast settling time, with excellent dc characteristics. Additional features such as internal compensation, offset null capability and current limiting are provided. The  $\mu$ A772 is ideal for use in A/D, D/A and sampled data systems, and in pulse amplifiers.

- FAST SETTLING TIME . . . 300 ns
- HIGH SLEW RATE . . . 60 V/μs
- HIGH GAIN BANDWIDTH . . . 10 MHz
- EXCELLENT INPUT CHARACTERISTICS
- CAN BE OPERATED NON-INVERTING OR INVERTING
- INTERNALLY COMPENSATED
- WIDE DIFFERENTIAL AND COMMON-MODE INPUT VOLTAGE RANGE
- WIDE SUPPLY RANGE



\*Planar is a patented Fairchild process.