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# ANALOG EXPRESS

# AMP771 Low Offset RRO Operational Amplifier

#### **General Description**

The AMP771 is Single low noise precision operational amplifiers intended for use in a wide range of applications. The AMP771 can operation in temperature range of  $-40 \,^{\circ}$ C to 125  $^{\circ}$ C with low input bias current. AMP771 is characterized to operate supply voltage range 2.7V to 5V with operating temperature range of  $-40 \,^{\circ}$ C to 85  $^{\circ}$ C.

The AMP771 is designed for precision, low noise, low voltage, and miniature systems. It provides rail-to-rail output swing into heavy loads. The maximum input offset voltage for the AMP771 is TBD  $\mu$ V at room temperature and the input common mode voltage range includes ground.

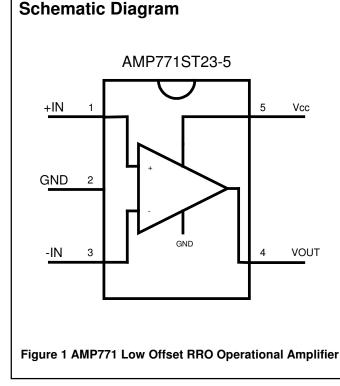
# Key Specification Voltage Bange

#### Features

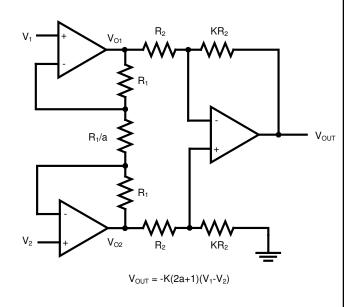
- Low Voltage noise
- Rail-to-rail output

#### **Applications**

- Transducer amplifier
- Instrumentation amplifier
- Precision current sensing
- Data acquisition systems
- Active filters and buffers
   Sample and hold
- Sample and hold
   Portable/Battery Power
- Portable/Battery Powered electronics



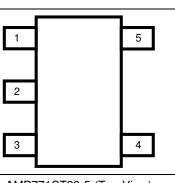
#### Instrumentation Amplifier



#### Figure 2 Application Example circuit

#### 1

## Pin Assignment



AMP771ST23-5 (Top View)

| Pin No. | Pin Name         | Туре | Description                 |
|---------|------------------|------|-----------------------------|
| 1       | +IN              | Ι    | Positive Differential Input |
| 2       | GND              | I    | Ground                      |
| 3       | -IN              | Ι    | Negative Differential Input |
| 4       | V <sub>OUT</sub> | 0    | Positive Output             |
| 5       | V <sub>CC</sub>  | I    | Power Supply                |

## **Operation Conditions**

| Parameter                   | Symbol          | Min | Тур | Max | Unit |
|-----------------------------|-----------------|-----|-----|-----|------|
| Power Supply Voltage        | V <sub>CC</sub> | 2.7 |     | 5.5 | V    |
| Operating Temperature Range | T <sub>A</sub>  | -40 |     | 85  | °C   |

# **Ordering Information**

| Part Number  | Package        | Marking⁺  |  |
|--------------|----------------|-----------|--|
| AMP771ST23-5 | 5-lead SOT23-5 | A771S XYZ |  |
|              |                |           |  |

+ XYZ = assembly and date code