0.05 μV/°C MAX, SINGLE-SUPPLY CMOS OPERATIONAL AMPLIFIER ZERO-DRIFT SERIES

FEATURES

- **Low Offset Voltage: 5 μV (max)**
- **Zero Drift: 0.02 μV/°C (typ)**
- **Quiescent Current: 570 μA**
- **Single-Supply Operation**

APPLICATIONS

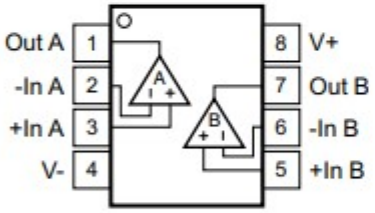
- **Transducer Applications**
- **Temperature Measurement**
- **Electronic Scales**
- **Medical Instrumentation**
- **Battery-Powered Instruments**
- **Handheld Test Equipment**

DESCRIPTION

The OPA2335M CMOS operational amplifier uses auto-zeroing techniques to simultaneously provide very low offset voltage (5 μV max), and near-zero drift over time and temperature. This high-precision, low quiescent current amplifier offers high input impedance and rail-to-rail output swing. Single or dual supplies as low as 2.7V (±1.35V) and up to 5.5V (±2.75 V) may be used. This op amp is optimized for low-voltage, single-supply operation.

PIN CONFIGURATIONS

OPA2335M



ABSOLUTE MAXIMUM RATINGS(1)

over operating free-air temperature range (unless otherwise noted)

		VALUE	UNIT
Supply voltage		7 V	
Signal input terminals	Voltage(2)	–0.5 to (V+) + 0.5	V
	Current(2)	±10	mA
Output short circuit(3)		Continuous	
Storage temperature T_A		–65 to 150	°C
Lead temperature (soldering, 10s)		300	°C

(1) Stresses above these ratings may cause permanent damage. Exposure to absolute maximum conditions for extended periods may degrade device reliability. These are stress ratings only, and functional operation of the device at these, or any other conditions beyond those specified, is not implied.
(2) Input terminals are diode-clamped to the power-supply rails. Input signals that can swing more than 0.5 V beyond the supply rails should be current-limited to 10 mA or less.
(3) Short-circuit to ground, one amplifier per package