OPA197

36V, Precision, Rail-to-Rail Input Output, Low Offset Voltage Op Amp

EBV Elektronik presents a robust, high-performance operational amplifier for high-voltage industrial applications. EBV Elektronik presents the OPAx197 family (OPA197, OPA2197, and OPA4197) as a new generation of 36 V operational amplifiers.

These devices offer outstanding dc precision and ac performance, including rail-to-rail input/output, low offset (±25 µV, typ), low offset drift (±0.25 µV/°C, typ), and 10MHz bandwidth.

Unique features such as differential input-voltage range to the supply rail, high output current (±65 mA), high capacitive load drive of up to 1nF, and high slew rate (20 V/µs) make the OPA197 a robust, highperformance operational amplifier for high-voltage, industrial applications.

The OPA197 family of op amps is available in standard packages and is specified from –40° C to +125° C.

KEY FEATURES

- Low offset voltage: ±250 µV (max)
- Low offset voltage drift: ±2.5 µV/°C (max)
- Low noise: 5.5 nV/&radicHz at 1 kHz
- High common-mode rejection: 120 dB (min)
- Low bias current: ±5 pA (typ)
- Rail-to-rail input and output
- Wide bandwidth: 10 MHz GBW
- High slew rate: 20 V/µs
- Low quiescent current: 1 mA per amplifier (typ)
- Wide supply: ±2.25 V to ±18 V, +4.5 V to +36 V
- EMI- and RFI-filtered inputs
- Differential input voltage range to supply rail
- High capacitive load drive capability: 1nF
- Industry standard packages:
  - Single in SOIC-8, SOT-5, and VSSOP-8
  - Dual in SOIC-8 and VSSOP-8
  - Quad in SOIC-14 and TSSOP-14

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APPLICATION EXAMPLES

- Multiplexed data-acquisition systems
- Test and measurement equipment
- High-resolution ADC driver amplifiers
- SAR ADC reference buffers
- Programmable logic controllers
- High-side and low-side current sensing
- High precision comparators