Low-Noise, High-Precision, JFET-Input, OPERATIONAL AMPLIFIER

FEATURES

- **INPUT VOLTAGE NOISE DENSITY: 4nV/√Hz at 1kHz**
- **INPUT VOLTAGE NOISE: 0.1Hz to 10Hz: 250nV$_{PP}$**
- **INPUT BIAS CURRENT: 15pA**
- **INPUT OFFSET VOLTAGE: 150μV (max)**
- **INPUT OFFSET DRIFT: 1μV/°C**
- **GAIN BANDWIDTH: 22MHz**
- **SLEW RATE: 28V/μs**
- **QUIESCENT CURRENT: 4.8mA/Ch**
- **WIDE SUPPLY RANGE: ±4V to ±18V**
- **SINGLE PACKAGES: MSOP-8, SO-8**
- **DUAL PACKAGES: SO-8 PowerPAD™**

APPLICATIONS

- **ADC DRIVERS**
- **DAC OUTPUT BUFFERS**
- **TEST EQUIPMENT**
- **MEDICAL EQUIPMENT**
- **PLL FILTERS**
- **SEISMIC APPLICATIONS**
- **TRANSIMPEDANCE AMPLIFIERS**
- **INTEGRATORS**
- **ACTIVE FILTERS**

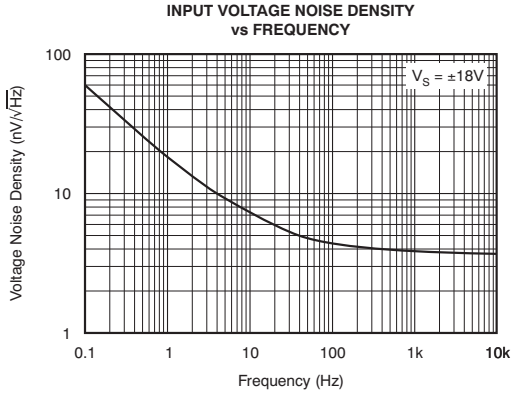
DESCRIPTION

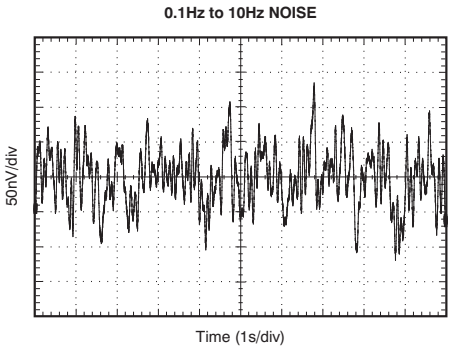
The OPA827 series of JFET operational amplifiers combine outstanding dc precision with excellent ac performance. These amplifiers offer low offset voltage (150μV, max), very low drift over temperature (1μV/°C, typ), low bias current (15pA, typ), and very low 0.1Hz to 10Hz noise (250nV$_{PP}$, typ). The device operates over a wide supply voltage range, ±4V to ±18V on a low supply current (4.8mA/Ch, typ).

Excellent ac characteristics, such as a 22MHz gain bandwidth product (GBW), 28V/μs slew rate, and precision dc characteristics make the OPA827 series well-suited for a wide range of applications including 16-bit to 18-bit data acquisition systems, transimpedance (I/V-conversion) amplifiers, filters, precision ±10V front ends, and professional audio applications.

The single version (OPA827) is available in both MSOP-8 and standard SO-8 surface-mount packages. The dual version (OPA2827) is available in the SO-8 PowerPAD for increased power dissipation capability. All versions are specified from –40°C to +125°C.

PRODUCT PREVIEW





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