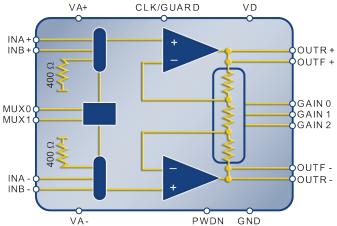




CS3301A/02A



7.9 mm CS3301A/CS3302A 24-pin SSOP dimensions

7.4 mm

CS3301A/02A Features

- Signal bandwidth: DC to 2,000 Hz
- Differential inputs, differential outputs
 - Multiplexed inputs: INA, INB, 800 Ω termination
- Max signal amplitude: 5 Vp-p differential
- High performance
 - Outstanding noise performance
 - CS3301A Geophone Amplifier
 - 0.18 µVp-p between 0.1 Hz and 10 Hz
 - 8.5 nV/ $\sqrt{\text{Hz}}$ from 0.1 Hz to 2 kHz
 - CS3302A Hydrophone Amplifier
 - 1 μ Vp-p between 0.1 Hz and 10 Hz • 8.5 nV/ \sqrt{Hz} from 200 Hz to 2 kHz
 - Low total harmonic distortion
 - -121 dB THD typical (0.0000891%)
 - -112 dB THD max (0.000251%)
 - Low-input bias
 - CS3301A, 1 nA
 - CS3302A, <1 pA
 - Low drift: 0.05 µV/°C max
- Low-power consumption
 - Normal/PWDN: 5.5 mA,10 μA
- High integration
 Pin-selectable gain:
 - x1, x2, x4, x8, x16, x32, x64
- Dual power supply configuration
 VA+ = +2.5 V; VA- = -2.5 V;
 - VA+ = +2.5 V; VA VD = +3.3 V
- Available in a 24-pin SSOP package

Low Noise & Low Power. New Seismic Amplifiers Deliver Outstanding Price/Performance Combination.

CS3301A/02A

Delivering low noise, high performance, and a small footprint, the CS3301A/02A seismic amplifiers are designed for use with geophone and hydrophone sensors. These highly integrated, programmablegain differential amplifiers are engineered for precise low frequency, high dynamic range measurements. Based on Cirrus Logic's patented Multipath[™] amplifier architecture, these powerful amplifiers provide unrivaled noise and drift performance. Low-power consumption combined with -121 dB THD performance makes them ideal for today's seismic applications. Chopper stabilized and designed for use with geophone sensors, the CS3301A delivers impressive low noise, low drift performance down to 0.1 Hz. The high input impedance of the CS3302A makes it well suited for use with hydrophone sensors, while still delivering outstanding noise and drift performance.

With an extensive feature set and available in a 24-pin SSOP package, these amplifiers provide an outstanding price/performance combination for seismic applications.

www.cirrus.com

Cirrus Logic, Inc. · 2901 Via Fortuna · Austin TX 78746 USA · T 512-851-4000 · T 800-888-5016 · F 512-851-4977 Product Bulletin 0076-0807-PB-W © 2007 Cirrus Logic, Inc. All rights reserved. Product information is subject to change without notice. Cirrus Logic is a trademark of Cirrus Logic, Inc. Other brand and product names may be trademarks or service marks of their respective owners.