

SP Amp ISOL Amp Single

Manufacturers	Analog Devices, Inc
Package/Case	PDIP-11
Product Type	Amplifier ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for AD203SN or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD203SN is designed and built expressly for use in hostile operating environments. The AD203SN is also an integral member of Analog Devices' AD200 Series of low cost, high performance, transformer coupled isolation amplifiers. Technological innovations in circuit design, transformer construction, surface mount components and assembly automation have resulted in a rugged, economical, military temperature range isolator that either retains or improves upon the key performance specifications of the AD202/AD204 line.

The AD203SN provides total galvanic isolation between the input and output stages of the isolation amplifier, including the power supplies, through the use of internal transformer coupling. The functionally complete design of the AD203SN, powered by a single +15 V dc supply, eliminates the need for an external dc/dc converter. This permits the designer to minimize the necessary circuit overhead and consequently reduce the overall design and component costs. Furthermore, the power consumption, nonlinearity and drift characteristics of transformer coupled devices are vastly superior to those achievable with other isolation technologies, without sacrificing bandwidth or noise performance. Finally, the AD203SN will maintain its high operating performance even under sustained common mode stress.

The design of the AD203SN emphasizes maximum flexibility and ease of use in a broad range of applications where signals must be measured or transmitted under high CMV conditions. The AD203SN has a ± 10 V output range, an uncommitted input amplifier, an output buffer, a 10 kHz full power bandwidth and a front-end isolated power supply of ± 15 V dc @ ± 5 mA.

Features

Rugged Design: characterized to MIL-STD-883C

Environmental Test Methods 1004 (Moisture Resistance) 1010 Condition B (Temperature Cycling, -55°C to +125°C) 2002 Condition B (Mechanical Shock @ 1,500 g for 0.5 ms) 2004 (Lead Integrity) 2007 Condition A (Variable Frequency Vibration @ 20g) 2015 (Resistance to Solvents)

Reliable Design: Conforms to Stringent Quality and Reliability Standards

Characterized to the Full Military Temperature Range

10 kHz Full Power Bandwidth

Low Nonlinearity: $\pm 0.025\%$ max

Wide Output Range: ± 10 V min (Into a 2.5 k Ω Load)

High CMV Isolation: 1500 V RMS Continuous

Isolated Power: ± 15 V DC @ ± 5 mA

Small Size: 2.23"x0.83"x0.65" 56.6 mm x 21.1 mm x 16.5 mm

Uncommitted Input Amplifier

Two-Port Isolation Through Transformer Coupling

Application

Engine Monitoring and Control

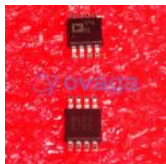
Mobile Multichannel Data Acquisition Systems

Instrumentation and/or Control Signal Isolation

Current Shunt Measurements

High Voltage Instrumentation Amplifier

Related Products



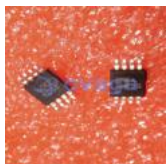
[AD8418BRMZ-RL](#)

Analog Devices, Inc
MSOP-8



[ADA4528-2ARMZ-R7](#)

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[ADA4084-2ARMZ](#)

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TSSOP-14



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SOP23



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