AD625JN

INST Amp Single ±18V 16-Pin PDIP Tube

Manufacturer:	Analog Devices, Inc
Package/Case:	DIP
Product Type:	Amplifier ICs
Lifecycle:	Obsolete

Images are for reference only

Inquiry

General Description

The AD625 is a precision instrumentation amplifier specifically designed to fulfill two major areas of application: 1) Circuits requiring nonstandard gains (i.e., gains not easily achievable with devices such as the AD524 and AD624). 2) Circuits requiring a low cost, precision software programmable gain amplifier.
For low noise, high CMRR, and low drift the AD625JN is the most cost effective instrumentation amplifier solution available. An additional three resistors allow the user to set any gain from 1 to 10,000. The error contribution of the AD625JN is less than 0.05% gain error and under 5 ppm/°C gain TC; performance limitations are primarily determined by the external resistors. Common-mode rejection is independent of the feedback resistor matching.
A software programmable gain amplifier (SPGA) can be configured with the addition of a CMOS multiplexer (or other switch network), and a suitable resistor network. Because the ON resistance of the switches is removed from the signal path, an AD625 based SPGA will deliver 12-bit precision, and can be programmed for any set of gains between 1 and 10,000, with completely user selected gain steps.
For the highest precision the AD625C offers an input offset voltage drift of less than 0.25 µV/°C, output offset drift below 15 µV/°C, and a maximum nonlinearity of 0.001% at>
The AD625 is available in three accuracy grades (A, B, C) for industrial (-40°C to +85°C) temperature range, two grades (J, K) for commercial (0°C to +70°C) temperature range, and one (S) grade rated over the extended (-55°C to +125°C) temperature range.

Key Features

User Programmed Gains of 1 to 10,000

Low Gain Error: 0.02% Max

Low Gain TC: 5 ppm/°C Max

Low Nonlinearity: 0.001% Max

Low Offset Voltage: 25 µV

Low Noise 4 nV/√Hz (at 1 kHz) RTI

MIL-Standard Parts Available

Gain Bandwidth Product: 25 MHz

16-Lead Ceramic or Plastic DIPPackage, 20-Terminal LCC Package

Standard Military Drawing Available

Low Cost

Recommended For You

AD8309ARUZ

Analog Devices, Inc

TSSOP16

AD524BDZ

Analog Devices, Inc

CDIP-16

AD8221BR

Analog Devices, Inc

SOP-8

AD8221ARZ

Analog Devices, Inc

SOP8

AD627BRZ

Analog Devices, Inc

SOP8

AD622ANZ

Analog Devices, Inc

DIP8

ADA4930-2YCPZ-R7

Analog Devices, Inc

LFCSP24

AD8034ARZ

Analog Devices, Inc

SOP8

AD8561ARZ

Analog Devices, Inc

SOP8

AD633JRZ

Analog Devices, Inc

SOP8

AD632AH

Analog Devices, Inc

CAN10

AD8422BRZ

Analog Devices, Inc

SOP8

ADCMP600BKSZ-R2

Analog Devices, Inc

SC70-5

AD620BN

Analog Devices, Inc

DIP8

AD620BR

Analog Devices, Inc

SOP