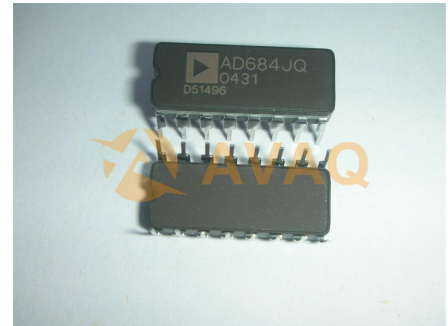


Sample and Hold 4-CH 1us 16-Pin CDIP Tube

Manufacturer:	Analog Devices, Inc
Package/Case:	CDIP16
Product Type:	Amplifier ICs
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The AD684 is a monolithic quad sample-and-hold amplifier (SHA). It features four complete sampling channels, each controlled by an independent hold command. Each SHA is complete with an internal hold capacitor. The high accuracy SHA channels are self-contained and require no external components or adjustments. The AD684 is manufactured on a BiMOS process which provides a merger of high performance bipolar circuitry and low power CMOS logic. The AD684 is ideal for high performance, multichannel data acquisition systems. Each SHA channel can acquire a signal in less than 1 μs and retain the held value with a droop rate of less than 0.01 $\mu\text{V}/\mu\text{s}$. Excellent linearity and ac performance make the AD684 an ideal front end for high speed 12- and 14-bit ADCs.

The AD684 has a self-correcting architecture that minimizes hold mode errors and insures accuracy over temperature. Each channel of the AD684 is capable of sourcing 5 mA and incorporates output short circuit protection.

The AD684 is specified for three temperature ranges. The J grade device is specified for operation from 0 to +70°C, the A grade from -40°C to +85°C and the S grade from -55°C to +125°C.

Key Features

Four Matched Sample-and-Hold Amplifiers

Independent Inputs, Outputs and Control Pins

500 μs Hold Mode Settling

1 μs Maximum Acquisition Time to 0.01%

Low Droop Rate: 0.01 $\mu\text{V}/\mu\text{s}$

Internal Hold Capacitors

75 ps Maximum Aperture Jitter

Low Power Dissipation: 430 mW

0.3" Skinny DIP Package

MIL-STD-883 Compliant Versions Available



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