LTC1569IS8-7#PBF

Active Filter Single Low Pass 10th Order 300kHz 8-Pin SOIC N Tube

Manufacturer:	Analog Devices, Inc
Package/Case:	SOP8
Product Type:	Active Filter
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

Images are for reference only

Inquiry

General Description

The LTC1569-7 is a 10th order lowpass filter featuring linear phase and a root raised cosine amplitude response. The high selectivity of the LTC1569-7 combined with its linear phase in the passband makes it suitable for filtering both in data communications and data acquisition sytems. Furthermore, its root raised cosine response offers the optimum pulse shaping for PAM data communications. The filter attenuation is 50dB at 1.5 • fCUTOFF, 60dB at 2 • fCUTOFF, and in excess of 80dB at 6 •fCUTOFF. DC-accuracy-sensitive applications benefit from the 5mV maximum DC offset.

The LTC1569-7 is the first sampled data filter which does not require an external clock yet its cutoff frequency can be set with a single external resistor with a typical accuracy of 3.5% or better. The external resistor programs an internal oscillator whose frequency is divided by either 1, 4 or 16 prior to being applied to the filter network. Pin 5 determines the divider setting. Thus, up to three cutoff frequencies can be obtained for each external resistor value. Using various resistor values and divider settings, the cutoff frequency can be programmed over a range of seven octaves. Alternatively, the cutoff frequency can be set with an external clock and the clock-to-cutoff frequency ratio is 32:1. The ratio of the internal sampling rate to the filter cutoff frequency is 64:1.

The LTC1569-7 is fully tested for a cutoff frequency of 256kHz/128kHz with single 5V/3V supply although up to 300kHz cutoff frequencies can be obtained. The LTC1569-7 features power savings modes and it is available in an SO-8 surface mount package.

Key Features

One external R sets cutoff frequency

5mV DC Accurate, VOS(maximum)

Low power modes

Differential or single-ended inputs

Operates from 3 to ±5V supplies

Application

Communications & Networking, Signal Processing

Recommended For You

LTC1562CG	LTC1164ACSW#PBF	LTC1068-25IG#PBF
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
SSOP20	24-SOIC	SSOP-28

LT1568IGN#PBF

Analog Devices, Inc

SSOP16

LTC1564IG

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SSOP

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SSOP16

LTC1063CN8#PBF

Analog Devices, Inc

DIP8

LTC1062CSW#PBF

Analog Devices, Inc

SOP

LTC1569CS8-7#PBF

Analog Devices, Inc

SOIC

LTC1060CSW#PBF

Analog Devices, Inc

SOP20

LTC1062CN8

Analog Devices, Inc

DIP8

LTC1060CN

Analog Devices, Inc

DIP20

LTC1063CN8

Analog Devices, Inc

DIP8

LTC1068-25CG#PBF

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SSOP-28

LTC1067-50CGN#PBF

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SSOP-16