Active Filter Quad SW-CAP UNIV 2nd Order 100kHz 16-Pin SOIC Tube

Manufacturer:	Texas Instruments, Inc
Package/Case:	SOP16
Product Type:	Active Filter
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active
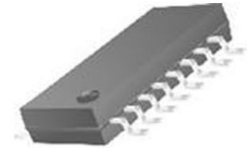
Images are for reference only

Inquiry

General Description

The UAF42 is a universal active filter that can be configured for a wide range of low-pass, high-pass, and band-pass filters. It uses a classic state-variable analog architecture with an inverting amplifier and two integrators. The integrators include on-chip 1000pF capacitors trimmed to 0.5%. This architecture solves one of the most difficult problems of active filter design—obtaining tight tolerance, low-loss capacitors.

A DOS-compatible filter design program allows easy implementation of many filter types, such as Butterworth, Bessel, and Chebyshev. A fourth, uncommitted FET-input op amp (identical to the other three) can be used to form additional stages, or for special filters such as band-reject and Inverse Chebyshev.

The classical topology of the UAF42 forms a time-continuous filter, free from the anomalies and switching noise associated with switched-capacitor filter types.

The UAF42 is available in 14-pin plastic DIP and SOIC-16 surface-mount packages, specified for the –25°C to +85°C temperature range.

Key Features

VERSATILE:
Low-Pass, High-Pass

Band-Pass, Band-Reject

SIMPLE DESIGN PROCEDURE

ACCURATE FREQUENCY AND Q:
Includes On-Chip 1000pF ±0.5% Capacitors

Recommended For You

UAF42AP	**UAF42AUE4**	**GC2011A-PQ**
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP14	SOP16	QFP

GC2011A-PB

Texas Instruments, Inc

BGA

TLC04ID

Texas Instruments, Inc

SOP-8

TLC04CD

Texas Instruments, Inc

SOP-8

TLC14ID

Texas Instruments, Inc

SOP8

TLC14CD

Texas Instruments, Inc

SOIC-8

MF10CCJ

Texas Instruments, Inc

DIP

LMF40CIWM-100

Texas Instruments, Inc

SOP

TLC04IDR

Texas Instruments, Inc

SOP-8

MF10AJ

Texas Instruments, Inc

CDIP

GC2011A-PB

Texas Instruments, Inc

TLC04ID

Texas Instruments, Inc

TLC04CD

Texas Instruments, Inc