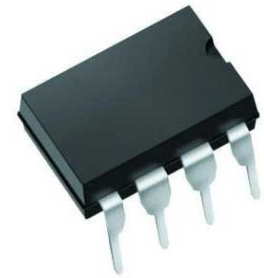


Active Filter Single SW-CAP Low Pass 8th Order 25kHz 8-Pin PDIP N



Images are for reference only

[Inquiry](#)

Manufacturer: [Maxim Integrated](#)

Package/Case: DIP8

Product Type: Active Filter

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The MAX293/MAX294/MAX297 are easy-to-use, 8th-order, lowpass, elliptic, switched-capacitor filters that can be set up with corner frequencies from 0.1Hz to 25kHz (MAX293/MAX294) or from 0.1Hz to 50kHz (MAX297). The MAX293/MAX297's 1.5 transition ratio provides sharp rolloff and -80dB of stopband rejection. The MAX294's 1.2 transition ratio provides the steepest rolloff and -58dB of stopband rejection. All three filters have fixed responses, so the design task is limited to selecting the clock frequency that controls the filter's corner frequency. An external capacitor is used to generate a clock using the internal oscillator, or an external clock signal can be used. An uncommitted op amp (noninverting input grounded) is provided for building a continuous-time lowpass filter for post-filtering or anti-aliasing. Steep rolloff and high order make these filters ideal for anti-aliasing applications that require maximum bandwidth, and for communication applications that require filtering signals in close proximity within the frequency domain. The MAX293/MAX294/MAX297 are available in 8-pin DIP and 16-pin wide SO packages, delivering aggressive performance from a tiny area.

Key Features

- Operate with a single +5V supply or dual $\pm 5V$ supplies
- Operating temperature range from 0°C to 70°C
- Clock to corner frequency ratio is 100:1
- Supply current is 15mA at dual $\pm 5V$ supply and 7mA at single 5V supply
- Passband ripple is 0.15dB
- THD plus noise is -71dB
- Clock oscillator frequency is 35KHz

Application

- Anti-Aliasing
- DAC Post-Filtering
- Data-Acquisition Systems
- Voice/Data Signal Filtering

Recommended For You

MAX293CPA

Maxim Integrated

DIP8

MAX291ESA+

Maxim Integrated

SOP-8

MAX7400CSA+

Maxim Integrated

SOIC(N)

MAX295EPA+

Maxim Integrated

PDIP8

MAX7409EUA+

Maxim Integrated

MSOP8

MAX7427CUA

Maxim Integrated

MSOP8

MAX7400ESA+

Maxim Integrated

SOP-8

MAX274ACNG+

Maxim Integrated

DIP24

MAX7410EUA+

Maxim Integrated

MSOP8

MAX280CPA+

Maxim Integrated

DIP-8

MAX274AENG+

Maxim Integrated

DIP

MAX274AEWI+

Maxim Integrated

SOP28

MAX267BCNG+

Maxim Integrated

Correctoriginal

MAX296ESA

Maxim Integrated

SOP-8

MAX7415CUA+

Maxim Integrated

SMDSMT