


Active Filter Single Continuous Time Low Pass/Band Pass 8th Order 150kHz 28-Pin SOIC W

Manufacturer:	Maxim Integrated
Package/Case:	SOP28
Product Type:	Active Filter
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The MAX274 and MAX275 are continuous-time active filters consisting of independent cascadable 2nd-order sections. Each section can implement any all-pole bandpass or lowpass filter response, such as Butterworth, Bessel, Chebyshev, and is programmed by four external resistors. The MAX274/MAX275 provide lower noise than switched-capacitor filters, as well as superior dynamic performance—both due to the continuous-time design. Since continuous-time filters do not require a clock, aliased and clock noise are eliminated with the MAX274/MAX275. The MAX274 comprises of four 2nd-order sections, permitting 8th-order filters to be realized. Center frequencies range up to 150kHz, and are accurate to within $\pm 1\%$ over the full operating temperature range. Total harmonic distortion (THD) is typically better than -86dB. The MAX275 comprises of two 2nd-order sections, permitting 4th-order filters to be realized. Center frequencies range up to 300kHz, and are accurate to within $\pm 0.9\%$ over the full operating temperature range. Total harmonic distortion (THD) is typically better than -86dB. Both filters operate from a single +5V supply or from dual $\pm 5V$ supplies.

Key Features

Continuous-Time Filter - No Clock, No Clock Noise

Implement Butterworth, Chebyshev, Bessel and Other Filter Responses

Lowpass, Bandpass Outputs

Operate from a Single +5V Supply or Dual $\pm 5V$ Supplies

Design Software Available

MAX274 Evaluation Kit Available

8th-Order-Four 2nd-Order Sections (MAX274)

4th-Order-Two 2nd-Order Sections (MAX275)

Center-Frequency Range:

150kHz for MAX274

300kHz for MAX275

Low Noise:

Center-Frequency Accurate Over Temp:

within $\pm 1\%$ for MAX274

within $\pm 0.9\%$ for MAX275

Application

Audio/Sonar/Avionics Frequency Filtering

DAC Output-Smoothing Filters

Low-Distortion Anti-Aliasing Filters

Modems

Vibration Analysis

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

MAX293CPA+

Maxim Integrated

DIP8

MAX7410EUA+

Maxim Integrated

MSOP8

MAX280CPA+

Maxim Integrated

DIP-8

MAX274AENG+

Maxim Integrated

DIP

MAX267BCNG+

Maxim Integrated

Correctoriginal

MAX296ESA

Maxim Integrated

SOP-8

MAX7415CUA+

Maxim Integrated

SMDSMT