

## Active Filter Single Continuous Time Low Pass/Band Pass 8th Order 150kHz 24-Pin PDIP N



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Maxim Integrated](#)

**Package/Case:** DIP

**Product Type:** Active Filter

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### 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

- Supply voltage range is 2.37V to 5.5V
- Operating temperature range from -40°C to 85°C
- Centre frequencies range up to 150kHz
- Centre frequency accurate over temperature within  $\pm 1\%$
- Total harmonic distortion (THD) is typically -86dB
- Supply current is 20mA
- Slew rate is 10V/ $\mu$ s

### 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

**MAX274AEWI+**

Maxim Integrated

SOP28

**MAX267BCNG+**

Maxim Integrated

Correctoriginal

**MAX296ESA**

Maxim Integrated

SOP-8

**MAX7415CUA+**

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