ADVANCE INFORMATION

All information in this data sheet is preliminary and subject to change.

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MAXIM

500MHz, High-Speed, Current-Mode Feedback Op Amps

General Description

The MAX4112/MAX4113 current-mode feedback op amps combine high-speed performance with low-power operation. The MAX4112 is optimized for closed-loop gains (A_{VCL}) of 2V/V or greater, while the MAX4113 is optimized for gains of 10V/V or greater.

The MAX4112/MAX4113 require only 5mA of supply current to deliver bandwidths of 500MHz ($A_V \geq 2V/V$) and 375MHz ($A_V \geq 10V/V$) respectively, producing an effective gain-bandwidth product of 1GHz for the MAX4112 and 3.8GHz for the MAX4113. The high slew rates (1500V/µs and 1800V/µs) provide exceptional full-power bandwidths (225MHz and 275MHz), making these amplifiers ideal for high-performance pulse and RGB video applications.

These high-speed op amps have a wide output voltage swing of ±3.5V and a high current-drive capability of 70mA.

Applications

Broadcast and High-Definition TV Systems

RGB Video

Pulse/RF Amplifier

Ultrasound

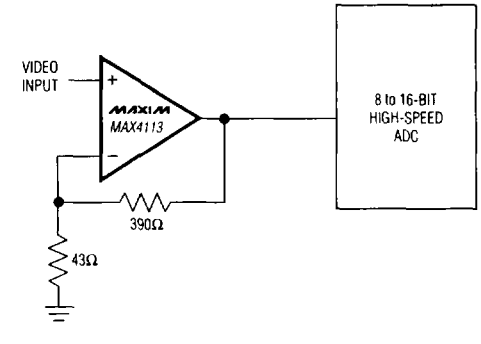
Active Filters

ADC Buffers

Features

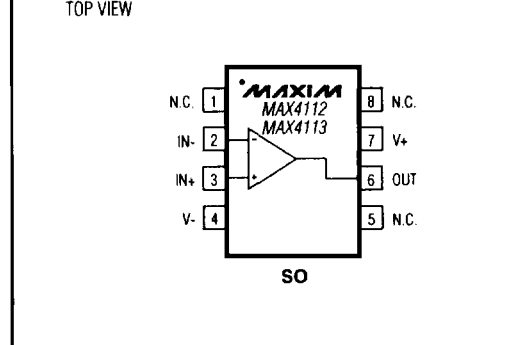
- **500MHz Gain Bandwidth (A_{VCL} = 2V/V, MAX4112)**
  375MHz Gain Bandwidth (A_{VCL} = 10V/V, MAX4113)
- **1500V/µs Slew Rate (MAX4112)**
  1800V/µs Slew Rate (MAX4113)
- **225MHz Full-Power Bandwidth (V_O = 2Vp-p, MAX4112)**
  275MHz Full-Power Bandwidth (V_O = 2Vp-p, MAX4113)
- **High Output Drive: 70mA**
- **Low Power: 5mA Supply Current**

Typical Application Circuit



ADC BUFFER WITH GAIN (A_{VCL} = 10V/V)

Pin Configuration



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