

ADVANCE INFORMATION

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

8/97



High-Speed, Low-Power, SOT23 Open-Loop Buffers

MAX4200-MAX4205

General Description

The MAX4200-MAX4205 are high-speed, open-loop buffers featuring high slew rate, high output current, and low noise. The MAX4200/MAX4201/MAX4202 are single buffers, while the MAX4203/MAX4204/MAX4205 are dual buffers. The MAX4201/MAX4204 have integrated 50Ω termination resistors, making them ideal for driving 50Ω transmission lines. The MAX4202/MAX4205 include on-chip, 75Ω back-termination resistors for driving 75Ω transmission lines. The MAX4200/MAX4203 have no internal termination resistors.

The MAX4200-MAX4205 use a proprietary architecture to achieve an 800MHz -3dB bandwidth, a 200MHz 0.1dB bandwidth, a slew rate of up to 4000V/μs, and a ±80mA output current drive. These buffers operate on ±5V supplies and draw only 2mA of quiescent current. These features, along with a -50dBc at 10MHz spurious-free dynamic range (SFDR), make these devices suitable for driving high-speed analog-to-digital converter (ADC) inputs or for data-communications applications.

Applications

High-Speed DAC Buffers

Wireless LANs

Digital Transmission Line Drivers

High-Speed ADC Input Buffers

Selector Guide

PART	No. OF AMPS	OUTPUT TERMINATION (Ω)	PIN-PACKAGE
MAX4200	1	—	8 SO 5 SOT23
MAX4201	1	50	8 SO 5 SOT23
MAX4202	1	75	8 SO 5 SOT23
MAX4203	2	—	8 SO/μMAX
MAX4204	2	50	8 SO/μMAX
MAX4205	2	75	8 SO/μMAX

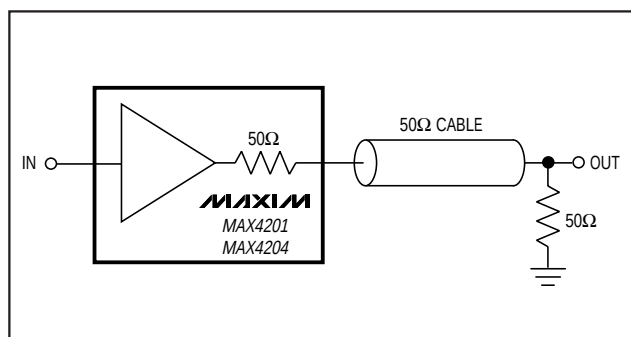
Features

- ♦ 2mA Supply Current
- ♦ High Speed:
 - 500MHz -3dB Bandwidth (MAX4200/03)
 - 800MHz -3dB Bandwidth (MAX4201/02/04/05)
- ♦ 200MHz 0.1dB Gain Flatness (MAX4202/05)
- ♦ 4000V/μs Slew Rate
- ♦ -50dBc SFDR at 10MHz
- ♦ ±80mA High Output Drive (MAX4200/MAX4203)
- ♦ Available in Space-Saving SOT23 or μMAX Packages

Ordering Information

PART	TEMP. RANGE	PIN-PACKAGE	SOT TOP MARK
MAX4200ESA	-40°C to +85°C	8 SO	—
MAX4200EUK-T	-40°C to +85°C	5 SOT23-5	AABZ
MAX4201ESA	-40°C to +85°C	8 SO	—
MAX4201EUK-T	-40°C to +85°C	5 SOT23-5	ABAA
MAX4202ESA	-40°C to +85°C	8 SO	—
MAX4202EUK-T	-40°C to +85°C	5 SOT23-5	ABAB
MAX4203ESA	-40°C to +85°C	8 SO	—
MAX4203EUA	-40°C to +85°C	8 μMAX	—
MAX4204ESA	-40°C to +85°C	8 SO	—
MAX4204EUA	-40°C to +85°C	8 μMAX	—
MAX4205ESA	-40°C to +85°C	8 SO	—
MAX4205EUA	-40°C to +85°C	8 μMAX	—

Typical Operating Circuit



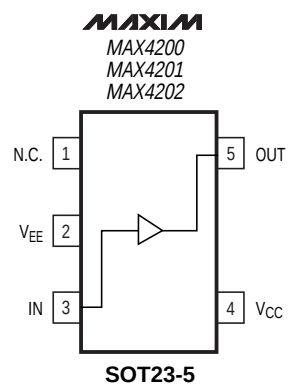
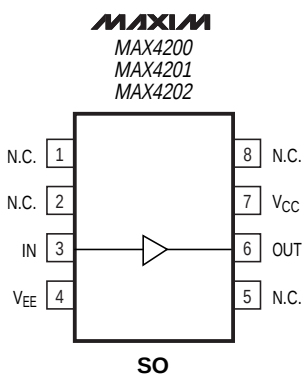
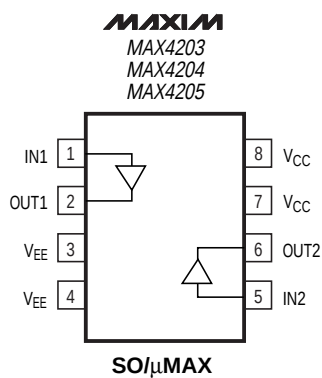
Maxim Integrated Products 1

For free samples & the latest literature: <http://www.maxim-ic.com>, or phone 1-800-998-8800
For small orders, phone 408-737-7600 ext. 3468.

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Pin Configurations

TOP VIEW



N.C. = NOT INTERNALLY CONNECTED