

MIC4424YM

Driver 3A 2-OUT Low Side Non-Inv 8-Pin SOIC N Tube

Manufacturer:	Microchip Technology, Inc.
Package/Case:	SOP8
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free W
Lifecycle:	Active



Images are for reference only

General Description

The MIC4423/4424/4425 family are highly reliable BiCMOS/DMOS buffer/driver/MOSFET drivers. They are higher output current versions of the MIC426/427/428. All three families are pin-compatible. The MIC4423/4424/4425 drivers are capable of giving reliable service in more demanding electrical environments than their predecessors. They will not latch under any conditions within their power and voltage ratings. They can survive up to 5V of noise spiking, of either polarity, on the ground pin. They can accept, without either damage or logic upset, up to half an amp of reverse current (either polarity) forced back into their outputs. The MIC4423/4424/4425 series drivers are easier to use, more flexible in operation, and more forgiving than other CMOS or bipolar drivers currently available. Their BiCMOS/DMOS construction dissipates minimum power and provides rail-to-rail voltage swings. Primarily intended for driving power MOSFETs, the MIC4423/4424/4425 drivers are suitable for driving other loads (capacitive, resistive, or inductive) which require low impedance, high peak currents, and fast switching times. Heavily loaded clock lines, coaxial cables, or piezoelectric transducers are some examples. The only known limitation on loading is that total power dissipated in the driver must be kept within the maximum power dissipation limits of the package.

Key Features

- Reliable, low-power bipolar/CMOS/DMOS construction
- Latch-up protected to >500mA reverse current
- Logic input withstands swing to -5V
- High 3A peak output current
- Wide 4.5V to 18V operating range
- Drives 1800pF capacitance in 25ns
- Short <40ns typical delay time
- Delay times consistent with in supply voltage change
- Matched rise and fall times
- TTL logic input independent of supply voltage
- Low equivalent 6pF input capacitance
- Low supply current
- 3.5mA with logic 1 input
- $350\mu A$ with logic 0 input
- Low 3.5Ω typical output impedance
- Output voltage swings within 25mV of ground or VS.
- Inverting, noninverting, and differential configurations





Recommended For You

MIC4451YN

Microchip Technology, Inc DIP8

MIC2954-02WS

Microchip Technology, Inc SOT223

MIC5013YN Microchip Technology, Inc

PDIP-8

MIC4123YME

Microchip Technology, Inc SOP-8

MIC49150WR Microchip Technology, Inc SPAK-5

MIC4427YN

Microchip Technology, Inc DIP8

MIC2951-02YM Microchip Technology, Inc SOP-8

MIC2582-MYM Microchip Technology, Inc SOP-8

MIC2951-02YM-TR Microchip Technology, Inc SOIC-8

MIC2506YM Microchip Technology, Inc SOP-8 **MIC4427YM**

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MIC4452ZT Microchip Technology, Inc TO-220-5

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MIC4422ZM Microchip Technology, Inc SOP8

MIC49300WR Microchip Technology, Inc S-PAK-5