

# MIC4427YM-TR

Data Sheet

Dual Low Side MOSFET Power Driver, 1.5A 8-Pin, SOIC

Manufacturers <u>Microchip Technology</u>, Inc

Package/Case SOIC-8

Product Type Power Management ICs

**RoHS** 

Lifecycle



Images are for reference only

Please submit RFQ for MIC4427YM-TR or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The MIC4426/4427/4428 family are highly-reliable dual low-side MOSFET drivers fabricated on a BiCMOS/DMOS process for low power consumption and high efficiency. These drivers translate TTL or CMOS input logic levels to output voltage levels that swing within 25mV of the positive supply or ground. Comparable bipolar devices are capable of swinging only to within 1V of the supply. The MIC4426/7/8 is available in three configurations: dual inverting, dual noninverting, and one inverting plus one noninverting output. The MIC4426/4427/4428 are pin-compatible replacements for the MIC426/427/428 and MIC1426/1427/1428 with improved electrical performance and rugged design. They can withstand up to 500mA of reverse current (either polarity) without latching and up to 5V noise spikes (either polarity) on ground pins. Primarily intended for driving power MOSFETs, MIC4426/7/8 drivers are suitable for driving other loads (capacitive, resistive, or inductive) which require low-impedance, high peak current, and fast switching time. Other applications include driving heavily loaded clock lines, coaxial cables, or piezoelectric transducers. The only load limitation is that total driver power dissipation must not exceed the limits of the package. Note See MIC4126/4127/4128 for high power and narrow pulse applications.

## **Features**

Bipolar/CMOS/DMOS construction
Latch-up protection to >500mA reverse current
1.5A peak output current
4.5V to 18V operating range
Low quiescent supply current
4mA at logic 1 input
400μA at logic 0 input
Switches 1000pF in 25ns
Matched rise and rall times
$7\Omega$ output impedance
Logic-input threshold independent of supply voltage
Logic-input protection to -5V
6pF typical equivalent input capacitance
25mV max. output offset from supply or ground
Replaces MIC426/427/428 and MIC1426/1427/1428
Dual inverting, dual noninverting, and inverting/noninverting configurations
ESD protection



### **Related Products**



#### **MIC94325YMT-TR**

Microchip Technology, Inc UDFN-6



#### MIC2009A-1YM6-TR

Microchip Technology, Inc SOT-23-6



#### **MIC4684YM**

Microchip Technology, Inc SOIC-8



#### MIC2090-1YM5-TR

Microchip Technology, Inc SOT-23-5



MIC5841YWM-TR

Microchip Technology, Inc

SOIC-18



Microchip Technology, Inc PDIP-16

**MIC5891YN** 



MIC29152WT

Microchip Technology, Inc
TO-220-5



MIC5209YM

Microchip Technology, Inc
SOIC-8