

## Driver 12A 1-OUT Low Side Inv 8-Pin PDIP Tube

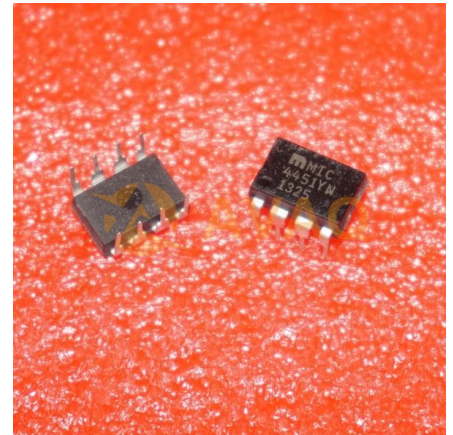
**Manufacturer:** [Microchip Technology, Inc](#)

**Package/Case:** DIP8

**Product Type:** Drivers

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active



Images are for reference only

[Inquiry](#)

### General Description

MIC4451 and MIC4452 CMOS MOSFET drivers are tough, efficient, and easy to use. The MIC4451 is an inverting driver, while the MIC4452 is a non-inverting driver. Both versions are capable of 12A (peak) output and can drive the largest MOSFETs with an improved safe operating margin. The MIC4451/4452 accepts any logic input from 2.4V to VS without external speed-up capacitors or resistor networks. Proprietary circuits allow the input to swing negative by as much as 5V without damaging the part. Additional circuits protect against damage from electrostatic discharge. MIC4451/4452 drivers can replace three or more discrete components, reducing PCB area requirements, simplifying product design, and reducing assembly cost. Modern Bipolar/CMOS/DMOS construction guarantees freedom from latch-up. The rail-to-rail swing capability of CMOS/DMOS helps ensure adequate gate voltage to the MOSFET during power up/down sequencing. Since these devices are fabricated on a self-aligned process, they have very low crossover current, run cool, use little power, and are easy to drive.

## Key Features

BiCMOS/DMOS construction

Latch-up proof: fully isolated process is inherently immune to any latch-up.

Input will withstand negative swing of up to 5V

Matched rise and fall times 25ns

High peak output current 12A peak

Wide operating range 4.5V to 18V

High capacitive load drive 62,000pF

Low delay time 30ns typ.

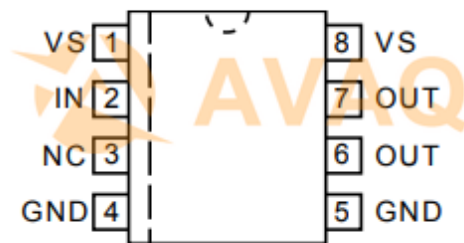
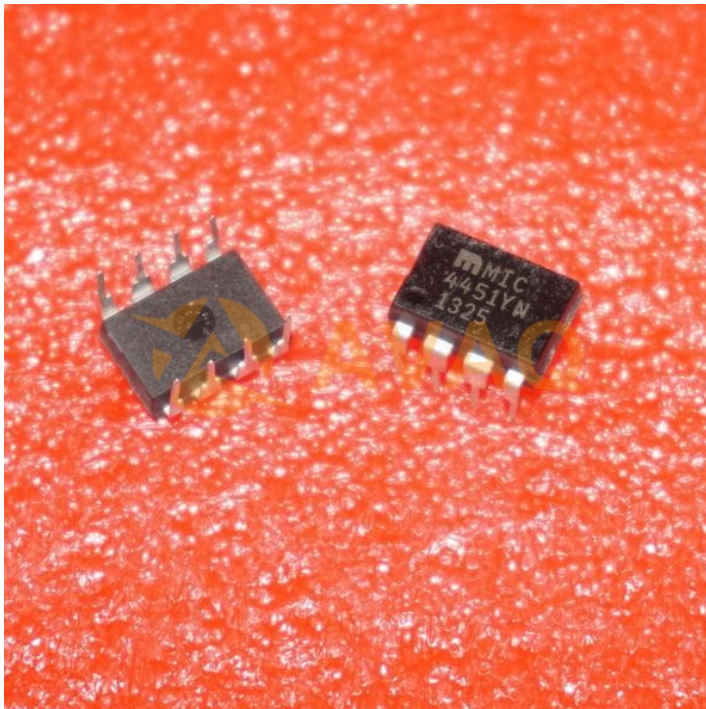
Logic high input for any voltage from 2.4V to VS

Low equivalent input capacitance (typ.) 7pF

Low supply current 450 $\mu$ A with logic 1 input

Low output impedance 1.0 $\Omega$

Output voltage swing to within 25mV of ground or VS



## Recommended For You

### MIC4427YN

Microchip Technology, Inc

DIP8

### MIC4427YM

Microchip Technology, Inc

SOP-8

### MIC2954-02WS

Microchip Technology, Inc

SOT223

**MIC2951-02YM**

Microchip Technology, Inc  
SOP-8

**MIC4452ZT**

Microchip Technology, Inc  
TO-220-5

**MIC5013YN**

Microchip Technology, Inc  
PDIP-8

**MIC2582-MYM**

Microchip Technology, Inc  
SOP-8

**MIC4224YM**

Microchip Technology, Inc  
SOP8

**MIC4123YME**

Microchip Technology, Inc  
SOP-8

**MIC2951-02YM-TR**

Microchip Technology, Inc  
SOIC-8

**MIC4422ZM**

Microchip Technology, Inc  
SOP8

**MIC49150WR**

Microchip Technology, Inc  
SPAK-5

**MIC2506YM**

Microchip Technology, Inc  
SOP-8

**MIC49300WR**

Microchip Technology, Inc  
S-PAK-5

**MIC94082YFT-TR**

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