



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

Manufacturer: <u>Microchip Technology, Inc</u>

Package/Case: SOP-8

Product Type: Drivers

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The MIC4123/4124/4125 family are highly reliable BiCMOS/DMOS buffer/driver/MOSFET drivers. They are higher output current versions of the MIC4126/4127/4128, which are improved versions of the MIC4426/4427/4428. All three families are pin-compatible. The MIC4123/4124/4125 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 MIC4123/4124/4125 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 MIC4123/4124/4125 drivers are suitable for driving otherloads (capacitive, resistive, or inductive) which require low impedance, high peak currents, and fast switching times. Heavily loaded clocklines, 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 >200mA reverse current

Logic input withstands swing to -5V

High 3A peak output current

Wide 4.5V to 20V operating range

Drives 1800pF capacitance in 25ns

Short <50ns 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

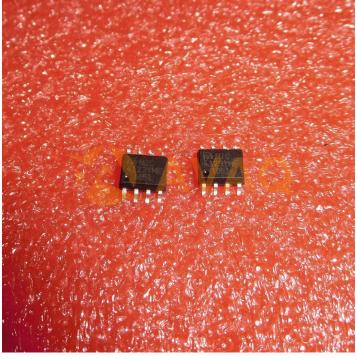
Low 2.3Ω typical output impedance

Output voltage swings within 25mV of ground or VS.

Inverting, noninverting, and differential configurations

Exposed backside pad packaging reduces heat ePad SOIC-8L (θ JA = 58°C/W) 4mm x 4mm MLF®-8L (θ JA = 45°C/W)





MIC4451YN

Microchip Technology, Inc

DIP8

MIC2954-02WS

Microchip Technology, Inc

SOT223

MIC5013YN

Microchip Technology, Inc

PDIP-8

MIC2951-02YM-TR

Microchip Technology, Inc

SOIC-8

MIC2506YM

Microchip Technology, Inc

SOP-8

MIC4427YN

Microchip Technology, Inc

DIP8

MIC2951-02YM

Microchip Technology, Inc

SOP-8

MIC2582-MYM

Microchip Technology, Inc

SOP-8

MIC4422ZM

Microchip Technology, Inc

SOP8

MIC49300WR

Microchip Technology, Inc

S-PAK-5

MIC4427YM

Microchip Technology, Inc

SOP-8

MIC4452ZT

Microchip Technology, Inc

TO-220-5

MIC4224YM

Microchip Technology, Inc

SOP8

MIC49150WR

Microchip Technology, Inc

SPAK-5

MIC94082YFT-TR

Microchip Technology, Inc

TMLF-4