# MIC4224YM

**Driver 4A 2-OUT Low Side Non-Inv 8-Pin SOIC N Tube**

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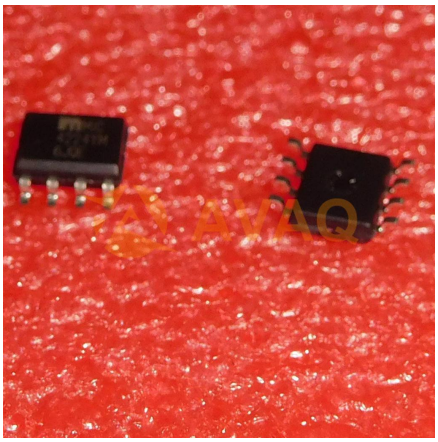
|---|---|
| **Manufacturer:** | Microchip Technology, Inc |
| **Package/Case:** | SOP8 |
| **Product Type:** | Drivers |
| **RoHS:** | RoHS Compliant/Lead free |
| **Lifecycle:** | Active |



Images are for reference only

Inquiry

## General Description

The MIC4223/MIC4224/MIC4225 are a family of a dual 4A, high-speed, low-side MOSFET drivers with logic-level driver enables. The devices are fabricated on Bipolar/CMOS/DMOS (BCD) process and operate from a 4.5V to 18V supply voltage. The devices parallel Bipolar and CMOS output stage architecture provides high current throughout the MOSFETs Miller Region allowing the driver to sink and source 4A of peak current from a 12V supply and quickly charge and discharge a 2000pF load capacitance in under 15ns, while allowing the outputs to swing within 0.3V of V DD and 0.16V of ground.The MIC4223/MIC4224/MIC4225 driver and enable inputs feature TTL and CMOS logic-level thresholds which are independent of supply voltage. Each driver features a dedicated active-high enable input which is internally pulled high to VDD through 100kΩ, allowing the pins to be left unconnected if it is not required to disable the driver outputs. The driver inputs have been designed to protect against ground bounce and are protected to withstand -5V of voltage swing at -40mA. Driver outputs are also protected to withstand 500mA of reverse current.The MIC4223/MIC4224/MIC4225 are available in three configurations using industry standard pin out; dual inverting (MIC4223), dual non-inverting (MIC4224) and complimentary (MIC4225). They are available in 8-pin SOIC and thermally enhanced ePadD 8-pin MSOP and support operating junction temperatures from -40°C to +125°C.

## Key Features

4.5V to 18V supply voltage operating range

High peak source/sink current

15ns/15ns rise and fall times with 2000pF load

25ns/35ns (rising/falling) input propagation delay

20ns/45ns (rising/falling) enable propagation delay

Active-high driver enable inputs with 100kΩ pull-ups

CMOS and TTL logic input and enable thresholds independent of supply voltage

Driver input protection to -5V at -40mA

Output latch-up protection to >500mA reverse current

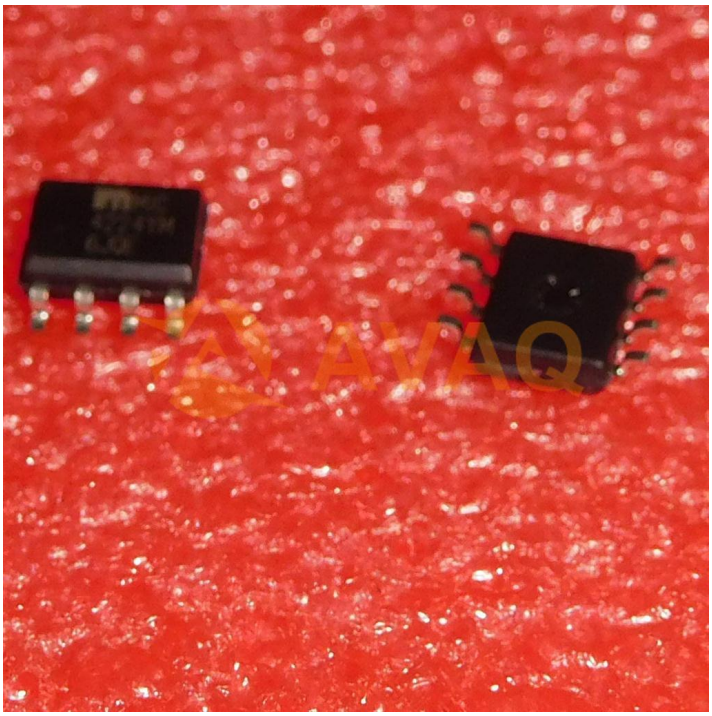
Industry standard pin out with two package options

ePad MSOP-8 ( θJA = 60°C/W)

8-pin SOIC ( θJA = 120°C/W)

Available in dual-inverting (MIC4223), dual non-inverting (MIC4224) and complementary (MIC4225)

Dual output drive by paralleling channels



## Recommended For You

| MIC4451YN | MIC4427YN | MIC4427YM |
|---|---|---|
| Microchip Technology, Inc | Microchip Technology, Inc | Microchip Technology, Inc |
| DIP8 | DIP8 | 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

**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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