



Data Sheet

6A High-Speed Power MOSFET Drivers, MOSFET & Power Driver ICs 6A Single

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

Package/Case SOIC-8

Product Type Power Management ICs

**RoHS** 

Lifecycle

Please submit RFQ for MCP1407-E/SN or Email to us: sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

**RFO** 

## **General Description**

The MCP1406/07 devices are a family of buffers/MOSFET drivers that feature a single-output with 6A peak drive current capability, low shoot-through current, matched rise/fall times and propagation delay times. These devices are pin-compatible and are improved versions of the TC4420/TC4429 MOSFET drivers. The MCP1406/07 MOSFET drivers can easily charge and discharge 2500 pF gate capacitance in under 20 ns, provide low enough impedances (in both the ON and OFF states) to ensure that intended state of the MOSFETs will not be affected, even by large transients. The input to the MCP1406/07 may be driven directly from either TTL or CMOS (3V to 18V). These devices are highly latch-up resistant under any conditions that fall within their power and voltage ratings. They are not subject to damage when up to 5V of noise spiking (of either polarity) occurs on the ground pin. All terminals are fully protected against electrostatic discharge (ESD), up to 2.0 kV (HBM) and 400V (MM). The MCP1406/07 single-output 6A MOSFET driver family is offered in both surface-mount and pin-through-hole packages with a -40°C to +125°C temperature rating, making it useful in any wide temperature range application.

## **Features**

Low Shoot-Through/Cross-Conduction Current in Output Stage

Wide Input Voltage Supply Voltage Operating Range

4.5V to 18V

Matched Rise/Fall Times

Pin compatible with TC4420/TC4429 devices

## **Related Products**



MCP1725-3302E/MC

Microchip Technology, Inc DFN-8



MCP1702T-2502E/CB

Microchip Technology, Inc SOT-23A-3



MCP1702T-5002E/CB

Microchip Technology, Inc SOT-23



MCP1700T-3002E/TT

Microchip Technology, Inc SOT-23-3



MCP1826T-ADJE/DC

Microchip Technology, Inc SOT-223-5



MCP1700T-2502E/TT

Microchip Technology, Inc SOT-23-3



MCP73830T-2AAI/MYY

Microchip Technology, Inc TDFN-6



MCP1703T-5002E/CB

Microchip Technology, Inc SOT-23A-3