

# HIP4081AIB

Data Sheet

### MOSFET & Power Driver ICs FULL-BRIDGE

Manufacturers Renesas Technology Corp

Package/Case SOIC-20

Product Type Power Management ICs

**RoHS** 

Lifecycle



Images are for reference only

Please submit RFQ for HIP4081AIB or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

# **General Description**

The HIP4081A is a high frequency, medium voltage Full Bridge N-Channel FET driver IC, available in 20 lead plastic SOIC and DIP packages. The HIP4081A can drive every possible switch combination except those which would cause a shoot-through condition. The HIP4081A can switch at frequencies up to 1MHz and is well suited to driving Voice Coil Motors, high-frequency switching power amplifiers, and power supplies. For example, the HIP4081A can drive medium voltage brush motors, and two HIP4081As can be used to drive high performance stepper motors, since the short minimum "on-time" can provide fine micro-stepping capability. Short propagation delays of approximately 55ns maximizes control loop crossover frequencies and dead-times which can be adjusted to near zero to minimize distortion, resulting in rapid, precise control of the driven load. A similar part, the HIP4080A, includes an on-chip input comparator to create a PWM signal from an external triangle wave and to facilitate "hysteresis mode" switching.

## **Features**

Independently Drives 4 N-Channel FET in Half Bridge or Full Bridge Configurations

Bootstrap Supply Max Voltage to 95V<sub>DC</sub>

Drives 1000pF Load at 1MHz in Free Air at 50°C with Rise and Fall Times of Typically 10ns

User-Programmable Dead Time

On-Chip Charge-Pump and Bootstrap Upper Bias Supplies

DIS (Disable) Overrides Input Control

Input Logic Thresholds Compatible with 5V to 15V Logic Levels

Very Low Power Consumption

Undervoltage Protection

Pb-free Available

#### **Related Products**



HIP4082IBZT

Renesas Technology Corp SOIC-16



HIP4086ABZ

Renesas Technology Corp SOIC-24



HIP4081AIPZ

Renesas Technology Corp PDIP-20



HIP2101IBZT

Renesas Technology Corp SOIC-8



HIP4080AIBZT

Renesas Technology Corp SOIC-20



**HIP4086AB** 

Renesas Technology Corp SOIC-24



HIP4080AIB

Renesas Technology Corp SOP-20



HIP2100IBZ

Renesas Technology Corp SOIC-8