

## Driver 5.1V 3.8A 4-OUT High and Low Side Full Brdg Inv/Non-Inv Automotive 20-Pin PDIP Tube



Images are for reference only

**Manufacturer:** [Renesas Technology Corp](#)

**Package/Case:** DIP20

**Product Type:** Drivers

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

[Inquiry](#)

### General Description

The HIP4080A is a high frequency, medium voltage Full Bridge N-Channel FET driver IC, available in 20 lead plastic SOIC and DIP packages. The HIP4080A includes an input comparator, used to facilitate the "hysteresis" and PWM modes of operation. Its HEN (high enable) lead can force current to freewheel in the bottom two external power MOSFETs, maintaining the upper power MOSFETs off. Since it can switch at frequencies up to 1MHz, the HIP4080A is well suited for driving Voice Coil Motors, switching power amplifiers and power supplies. HIP4080A can also drive medium voltage brush motors, and two HIP4080As 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 maximize control loop crossover frequencies and dead-times which can be adjusted to near zero to minimize distortion, resulting in precise control of the driven load. The similar HIP4081A IC allows independent control of all 4 FETs in a Full Bridge configuration.

### Key Features

Drives N-Channel FET Full Bridge Including High Side Chop Capability

Bootstrap Supply Max Voltage to 95VDC

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

User-Programmable Dead Time

Charge-Pump and Bootstrap Maintain Upper Bias Supplies

DIS (Disable) Pin Pulls Gates Low

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

Very Low Power Consumption

Undervoltage Protection

Pb-Free Available as an Option

### Recommended For You

**HIP4080AIBZ**

Renesas Technology Corp  
SOP20

**HIP4082IPZ**

Renesas Technology Corp  
DIP16

**HIP4082IBZ**

Renesas Technology Corp  
SOP16

**HIP6020ACB**

Renesas Technology Corp  
SOP28

**HIP6008CB**

Renesas Technology Corp  
SOP16

**HIP1015CB**

Renesas Technology Corp  
SOP8

**HIP6020ACB-T**

Renesas Technology Corp  
SOP-8

**HIP6021ACB**

Renesas Technology Corp  
SOP28

**HIP1011BCB**

Renesas Technology Corp  
SOP

**HIP6500BCB-T**

Renesas Technology Corp  
SOP20

**HIP1011ACB**

Renesas Technology Corp  
SOP16

**HIP6201CB**

Renesas Technology Corp  
SOP8

**HIP1011CB**

Renesas Technology Corp  
SOP

**HIP6503CB**

Renesas Technology Corp  
SOP20

**HIP6500BCB**

Renesas Technology Corp  
SOP20