

HIP4080AIB

Data Sheet

Gate Drivers 60-80 VDC HI FREQ H- BRDG DRIVER

Manufacturers Renesas Technology Corp	
Package/Case SOP-20	
Product Type Power Management ICs Images are for reference only	
RoHS	
Lifecycle	
Please submit RFQ for HIP4080AIB or <u>Email to us: sales@ovaga.com</u> We will contact you in 12 hours.	<u>RFQ</u>

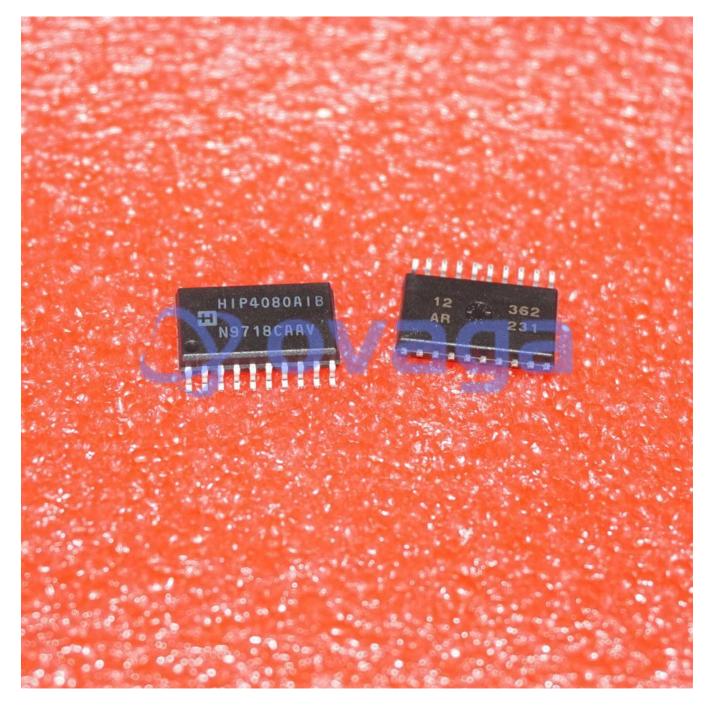
General Description

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.

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





Related Products



HIP4082IBZT

Renesas Technology Corp SOIC-16



SOIC-16 <u>HIP4086ABZ</u>

Renesas Technology Corp SOIC-24





HIP4080AIBZT

Renesas Technology Corp SOIC-20

HIP4086AB

Renesas Technology Corp SOIC-24



HIP4081AIPZ

Renesas Technology Corp PDIP-20



HIP2101IBZT

Renesas Technology Corp SOIC-8



HIP2100IBZ

Renesas Technology Corp SOIC-8



HIP4080AIP

Renesas Technology Corp DIP-20