



Data Sheet

## 55V, 1A Peak Current H-Bridge FET Driver

Manufacturers Renesas Technology Corp

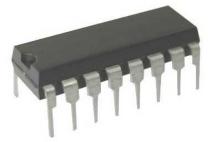
Package/Case DIP16

Product Type Power Management ICs

RoHS

Lifecycle

Please submit RFQ for ISL83202IPZ or Email to us: sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

**RFO** 

## **General Description**

The ISL83202 is a medium-frequency H-Bridge FET driver capable of 1A (typ) of peak drive current that is designed to drive high- and low-side N-Channel MOSFETs in medium voltage applications. Optimized for PWM motor control and uninterruptible power supply systems, the ISL83202 enables simple and flexible bridge-based design. With typical input-to-output propagation delays as low as 25ns and with a user programmable dead-time range of 0.1 µs to 4.5 µs, the ISL83202 is ideal for switching frequencies up to 200kHz. The dead-time of the ISL83202 is programmable via a single resistor. The ISL83202's four independent driver control inputs (ALI, AHI, BLI, and BHI) allow driving of every possible switch combination except those that would cause a shoot-through condition. A global disable input, DIS, overrides input control and causes the ISL83202 to refresh the bootstrap capacitor when pulled low. Integrated undervoltage protection and shoot-through protection ensure reliable system operation. The ISL83202 is available in compact 16 Ld SOIC and 16 Ld PDIP packages and operates over the range of -55°C to +125°C.

## **Features**

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

Bootstrap Supply Max Voltage: 70VDC

Drives a 1000pF Load in Free Air at +50°C with Rise and Fall Times of 15ns (typ)

User-Programmable Dead Time from 0.1 to 4.5 µs

DIS (Disable) Overrides Input Control and Refreshes Bootstrap Capacitor when Pulled Low

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

**Shoot-Through Protection** 

Undervoltage Protection

Pb-Free Plus Anneal Available (RoHS Compliant)

## **Related Products**



ISL6262ACRZ

Renesas Technology Corp QFN-48



<u>ISL21080CIH315Z-TK</u>

Renesas Technology Corp SOT-23-3



ISL6377HRZ-T

Renesas Technology Corp QFN-48



ISL62771HRTZ

Renesas Technology Corp QFN40



ISL6294IRZ-T

Renesas Technology Corp QFN-8



ISL6506BCBZ

Renesas Technology Corp SOP-8



ISL62771HRTZ-T

Renesas Technology Corp 40-WFQFN Exposed Pad



ISL95808HRZ-T

Renesas Technology Corp DFN-8