

flexiBrute Full-Bridge Assembly 2.0

This full-bridge assembly can be used with both SOT-227 based IGBTs and MOSFETs. A full-bridge of IXFN24N50 or IXFN28N50 MOSFETs is a very popular option for high power audio modulation SSTCs.

Typical Applications:

- Low-to-mid power DRSSCTCs
- SSTCs
- Audio Modulated SSTCs
- Induction Heating
- Power supplies / inverters

Introduction

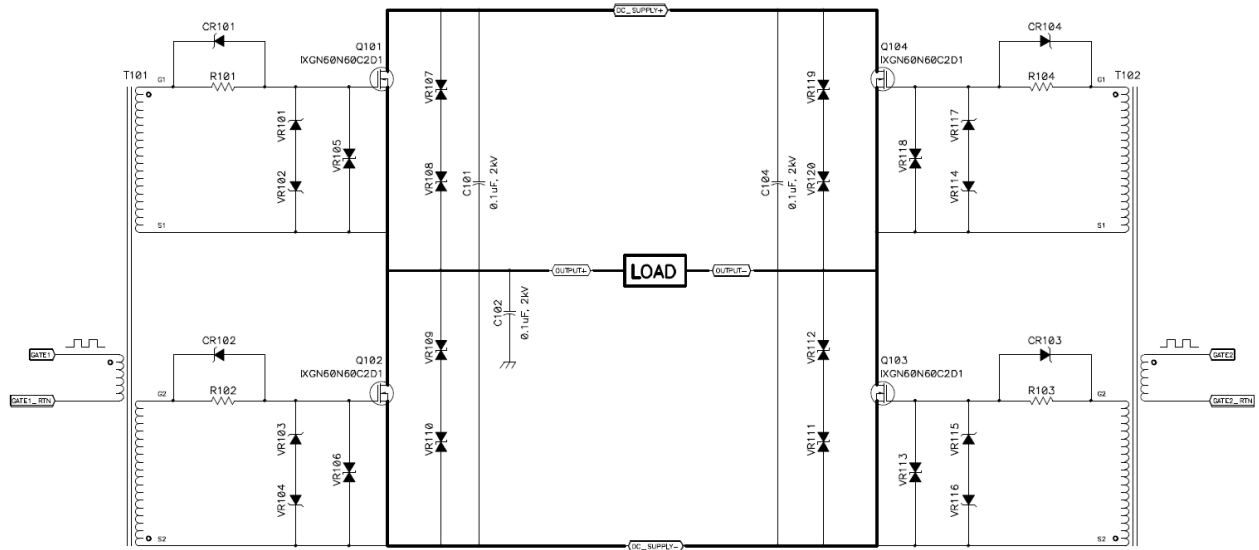
The flexiBrute Full-Bridge Assembly 2.0 provides a mid-power, high current switching full-bridge for low-to-mid power DRSSCTCs and other power equipment, including SSTCs, induction heaters, and power supplies. The assembly includes two (4) IXYS IXGN60N60C2D1 IGBTs, gate drive circuitry, transient voltage protection devices on both the gate drive circuits and across the IGBTs, as well as 0.1uF, 2kV snubber capacitors for protection. A 0.1uF, 2kV shunt capacitor from output to chassis ground provides excellent protection against secondary to primary coil strikes.

A gate transformer is also provided. The entire full-bridge assembly is mounted directly onto an extruded aluminum heatsink.

Electrical Properties

IGBT Devices	IXYS IXGN60N60C2D1
Max. Current (peak)	> 500A peak
Max. Bus Voltage	400V 600V (see note)
Switching Frequency	> 350kHz
Gate Transformer	flexiBrute Core 77-1
Max. Output Voltage	+/- 400V (w/ 400V bus)

Note: 600V is allowable with updated transient protection devices. TVS as sold with kit will clamp at 440V.



Schematic Diagram

