

Product Overview

FSB50450BS: Intelligent Power Module, 500V, 4A

For complete documentation, see the data sheet.

The FSB50450BS is an advanced Motion SPM[®] 5 module providing a fully-featured, high-performance inverter output stage for AC Induction, BLDC and PMSM motors. These modules integrate optimized gate drive of the built-in MOSFETs (FRFET[™] technology) to minimize EMI and losses, while also providing multiple on-module protection features including under-voltage lockouts and thermal monitoring. The built-in high-speed HVIC requires only a single supply voltage and translates the incoming logic-level gate inputs to the high-voltage, high-current drive signals required to properly drive the module's internal MOSFETs. Separate open-source MOSFET terminals are available for each phase to support the widest variety of control algorithms.

Features

- UL Certified No. E209204 (UL1557)
- Optimized for over 10 kHz Switching Frequency
- 500 V FRFET MOSFET 3-Phase Inverter with Gate Drivers and Protection
- Built-In Bootstrap Diodes Simplify PCB Layout
- Separate Open-Source Pins from Low-Side MOSFETs for Three-Phase Current-Sensing
- Active-HIGH Interface, Works with 3.3 / 5 V Logic, Schmitt-trigger Input
- Optimized for Low Electromagnetic Interference
- HVIC Temperature-Sensing Built-In for Temperature Monitoring
- HVIC for Gate Driving and Under-Voltage Protection
- Isolation Rating: 1500 V_{rms} / min.

For more features, see the data sheet

Part Electrical Specifications

Product	Compliance	Status	Family	Rated Voltage Min (V)	I _O @ 25 °C Min (A)	V _{CE(sat)} @ 25 °C Typ (V)	R _{DS(on)} (Ω)	Emitter Configuration	Shutdown Pin	Package Type
FSB50450BS	Pb-free Halide free	Active	SPM [®] 5 Series	500	2.2	-	4.3	3 source pins	No	SMD-023

For more information please contact your local sales support at www.onsemi.com.

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