

Product Overview

NVH820S75L4SPB: VE-Trac Direct - Single Side Direct Cooling Full-Bridge 6-Pack Power Module for Automotive, 750V, 820A, Short Tabs

For complete documentation, see the data sheet.

The NVH820S75L4SPB is a power module from the VE-Trac™ Direct family of highly integrated power modules with industry-standard footprints for Hybrid and Electric Vehicle (HEV) traction inverter application.

The module integrates six Field Stop 4 (FS4) 750V Narrow Mesa IGBTs in a 6-pack configuration. FS4 IGBTs show low power losses during lighter loads, which helps to improve overall system efficiency in automotive applications. For assembly ease and reliability, a new generation of press-fit pins is integrated into the power module signal terminals.

Features

- Direct Cooling with Integrated Pin-Fin Heatsink
- Ultra-low Stray Inductance
- $T_{jmax} = 175^{\circ}\text{C}$ continuous operation
- Low VCESAT and Switching losses
- AQG324 Qualified FS4 750V Narrow Mesa IGBT
- Highly Integrated 6-pack Topology

Applications

- Inverter DC Battery Output to Power AC Traction Motors
- High Power DC-DC Converter

Benefits

- Low System Cost
- Lower Energy Losses
- Higher Inverter Peak Output Power
- Improved Inverter Efficiency
- Optimized for Automotive Traction Applications
- Easy Design and Integration

End Products

- Main Traction Inverter for Battery Electric Vehicle, Plug-in Hybrid Vehicles, and Full Hybrid Vehicles

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Configuration	V_{BR} Max (V)	Rated Current (A)	$V_{CE(sat)}$ Typ (V)	V_F Typ (V)	Application	Package Type
NVH820S75L4SPB	452.7413	Pb-free Halide free non AEC-Q and PPAP	Active	Six-Pack	750	820	1.3	1.7	Automotive Traction Inverter	SSDC33, 154.50x92.0 (SPB)

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

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