Product Overview

NVG800A75L4DSC: VE-Trac Dual - Dual Side Cooling Half-Bridge Power Module for Automotive, 750V, 800A, 90° Power Tabs

For complete documentation, see the data sheet.

The NVG800A75L4DSC is part of a family of power modules with dual side cooling and compact footprints for Hybrid (HEV) and Electric Vehicle (EV) traction inverter application.

The module consists of two Field Stop 4 (FS4) Narrow Mesa IGBTs in a half-bridge configuration. The chipset utilizes the new narrow mesa IGBT technology in providing high current density and robust short circuit protection with higher blocking voltage to deliver outstanding performance in EV traction applications.

A dual-side liquid cooling heatsink reference design along with a complete inverter kit (NVG800A75L4-EVK) is available to enable easier design in.

Features

- Half Bridge Dual-Side Cooling
- Ultra-Low Stray Inductance
- Tj_max = 175°C continuous operation
- Low VCESAT and Switching losses
- AQG324 Qualified FS4 750V Narrow Mesa IGBT
- Smart On Chip Current and Temperature Sensor
- Wirebond-Free Structure

Benefits

- Scalable, Modular, and Compact
- Lower Energy Losses
- Higher Inverter Peak Output Power
- Improved Inverter Efficiency
- Optimized for Automotive Traction Applications
- Fast Reaction Time and Better Accuracy
- Longer Power Cycle and Operation Lifetime

Applications

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

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
NVG800A75L4DSC	138.4557	AEC Qualified PPAP Capable Pb-free Halide free	Active	Half-Bridge	750	800	1.3	1.4	Automotive Traction Inverter	AHPM15-CEA

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

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