

Product Overview

NCV84160: Protected MOSFET High-Side Driver, 12 A, 160 mΩ

For complete documentation, see the data sheet.

The NCV84160 is a fully protected single channel high side driver that can be used to switch a wide variety of loads, such as bulbs, solenoids, and other actuators. The device incorporates advanced protection features such as active inrush current management, over-temperature shutdown with automatic restart and an overvoltage active clamp. A dedicated Current Sense pin provides precision analog current monitoring of the output as well as fault indication of short to battery, short circuit to ground, and ON and OFF state open load detection. An active high Current Sense Disable pin allows all diagnostic and current sense features to be disabled.

Features

- Accurate Output Current Sense Feedback
- Diagnostic Feedback on Current Sense Pin
- Delta Thermal Shutdown
- Thermal Shutdown with Auto Restart
- Undervoltage Shutdown
- ESD Protection
- Open Load Detection in On and Off State
- Output Short to Battery Detection
- Integrated Clamp for Inductive Switching
- Loss of GND and Loss of Battery Protection

For more features, see the data sheet

Benefits

- Current Monitoring Capability
- Immediate Fault Reporting
- Improved Robustness for Short Circuit Events
- Driver and Load Protection

Applications

- Switch a Variety of Resistive, Inductive, and Capacitive Loads
- Switch loads such as Bulbs, Solenoids, and other Actuators.

End Products

- Automotive

Part Electrical Specifications

Product	Compliance	Status	Channel Polarity	$V_{(BR)DSS}$ Min (V)	I_D Typ (A)	$r_{DS(on)}$ Max (mΩ)	P_D Max (W)	Package Type
NCV84160DR2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	High Side Switch	41	1	160	1.49	SOIC-8

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

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