

Product Overview

NCP5183: High Voltage 4.3 A High and Low Side Driver

For complete documentation, see the data sheet.

The NCP5183 is a High Voltage High Current Power MOSFET Driver providing two outputs for direct drive of 2 N-channel power MOSFETs arranged in a half-bridge (or any other high-side + low-side) configuration. It uses the bootstrap technique to insure a proper drive of the High-side power switch. The driver works with 2 independent inputs to accommodate any topology (including half-bridge, asymmetrical half-bridge, active clamp and full-bridge...).

Features

- Output Source / Sink Current Capability 4.3 A / 4.3 A
- Extended Allowable Negative Bridge Pin Voltage Swing to – 10 V
- Voltage Range up to 600 V with dV/dt Immunity ± 50 V/ns
- Gate Drive Supply Range from 9 V to 18 V
- Automotive Qualified to AEC Q100

Benefits

- Can drive big MOSFET, IGBT's
- Rugged design

Applications

- High Voltage Synchronous-Buck Converters
- Half-Bridge and Full-Bridge Converters
- Electric Power Steering & Motor Control

End Products

- Power Supplies for Telecom and Datacom
- Push-Pull Converters
- Automotive power conversion

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Power Switch	Number of Outputs	Topology	Isolation Type	V _{in} Max (V)	V _{CC} Max (V)	Drive Source / Sink Typ (mA)	Rise Time (ns)	Fall Time (ns)	t _p Max (ns)	Package Type
NCP5183DR2G	0.9333	Pb-free Halide free	Active	MOSFET / IGBT	2	High-Low	Junction Isolation	600	18	4300 / 4300	12	12	200	SOIC-8
NCV5183DR2G	1.9653	AEC Qualified PPAP Capable Pb-free Halide free	Active	MOSFET / IGBT	2	High-Low	Junction Isolation	600	18	4300 / 4300	12	12	200	SOIC-8

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

Created on: 4/10/2020