

Product Overview

NCP51530: High Performance, 700 V- 3.5/3.0 A High and Low Side MOSFET Driver

For complete documentation, see the data sheet.

NCP51530 is a 700 V high side and low side driver with high drive capabilities for AC-DC power supplies and inverters. NCP51530 offers best in class propagation delays, low quiescent current and low switching current at high frequencies of operation. This device thus enables a highly efficient design for power supplies operating at high frequencies. NCP51530 comes in SOIC8 and DFN10 packages.

Features

- High voltage range: Up to 700 V
- Very fast propagation delay (25 ns for B version)
- Matched propagation delay (7 ns Max)
- High dv/dt immunity up to 50 V/ns and negative transient immunity
- DFN10 packaging with optimized pin-out
- Fast Rise and Fall times (15 ns max)

Applications

- Half and Full-bridge Converters
- Active Clamp Flyback adapters
- Motor controls Power Supply

Benefits

- Design margin for AC/DC design
- Suitable for high frequency operation
- Increased efficiency & Allow paralleling
- Very robust design
- Small PCB footprint, improved creepage distance and parasitic
- Suitable for heavy loads

End Products

- Power Supply for Servers, Telecom and Industrial
- Electric power steering
- Solar inverters

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 _o Max (ns)	Package Type
NCP51530ADR2G	0.714	Pb-free Halide free	Active	MOSFET / IGBT	2	High-Low	Junction Isolation	700	20	3500 / 3000	8	8	60	SOIC-8
NCP51530AMNTWG	0.833	Pb-free Halide free	Active	MOSFET / IGBT	2	High-Low	Junction Isolation	700	20	3500 / 3000	8	8	60	DFN-10
NCP51530BDR2G	0.714	Pb-free Halide free	Active	MOSFET / IGBT	2	High-Low	Junction Isolation	700	20	3500 / 3000	8	8	25	SOIC-8
NCP51530BMNTWG	0.833	Pb-free Halide free	Active	MOSFET / IGBT	2	High-Low	Junction Isolation	700	20	3500 / 3000	8	8	25	DFN-10

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

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