Product Overview

NCD5701: IGBT Gate Drivers, High-Current, Stand-Alone

For complete documentation, see the data sheet.

The NCD5701 series is a set of high-current, high-performance stand-alone IGBT drivers for medium-to-high power applications that include induction heating, welding, solar inverters, motor control and uninterruptable power supplies. The devices offer a cost-effective solution by eliminating many external components. Device protection features include Active Miller Clamp (for NCD5701A), accurate UVLO, DESAT protection and Active Low FAULT output. The drivers also feature an accurate 5.0 V output (for all versions) and separate high and low (VOH and VOL) driver outputs (for NCD5701C only) for system design convenience. The drivers are designed to accommodate a wide voltage range of unipolar bias supplies (and bipolar bias supplies for NCD5701B).All versions are available in an 8-pin SOIC package.

Features

- High Current Output (+4.0/-6.0 A) at IGBT Miller Plateau voltages
- Low VOH and VOL
- Active Miller Clamp (NCD5701A only)
- DESAT Protection with Programmable Delay

Benefits

- Reduced switching losses and short switching times
- Full enhancement of IGBT
- Prevents Spurious Gate Turn-on
- Enhanced programmable protection

Applications

- DC-AC Inverter
- Battery Charger
- PFC
- Motor Driver
- Driver

End Products

- Solar Inverters
- Uninteruptible Power Supplies (UPS)
- Motor Control
- Induction Cooker
- Inverter Welder

Part Electrical Specifications

Product	Compliance	Status	Type	Number of Drivers	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
NCD5701ADR2G	Pb-free Halide free	Active	IGBT	1	5.5	35	5000 / 5000	30	30	70	SOIC-8
NCD5701BDR2G	Pb-free Halide free	Active	IGBT	1	5.5	35	5000 / 5000	30	30	70	SOIC-8
NCD5701CDR2G	Pb-free Halide free	Active	IGBT	1	5.5	35	5000 / 5000	30	30	70	SOIC-8

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

Created on: 11/26/2018