

Product Overview

NCD5700: IGBT Gate Drivers, High-Current, Stand-Alone

For complete documentation, see the data sheet.

The NCD5700 is a high-current, high-performance stand-alone IGBT driver for high power applications that include solar inverters, motor control and uninterruptible power supplies. The device offers a cost-effective solution by eliminating many external components. Device protection features include Active Miller Clamp, accurate UVLO, EN input, DESAT protection and Active Low FAULT output. The driver also features an accurate 5.0 V output and separate high and low (VOH and VOL) driver outputs for system design convenience. The driver is designed to accommodate a wide voltage range of bias supplies including unipolar and bipolar voltages. It is available in a 16-pin SOIC package.

Features

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

Applications

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

Benefits

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

End Products

- Solar Inverters
- Uninterruptible Power Supplies (UPS)
- Motor Control

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
NCD5700DR2G		Pb-free Halide free	Active	IGBT	1	Single	Non-Isolated	5.5	35	5000 / 5000	30	30	70	SOIC-16

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

Created on: 4/5/2020