

Product Overview

NCD5702: IGBT Gate Driver, High Current

For complete documentation, see the data sheet.

The NCD5702 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 open-drain FAULT output. The driver also features an accurate 5.0 V output and separate high and low (V_{OH} and V_{OL}) 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 Impedance V_{OH} and V_{OL}
- Active Miller Clamp
- DESAT Protection with Programmable Delay

Applications

- DC-AC Inverter
- Battery Charger
- PFC
- IH Cooktop

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	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
NCD5702DR2G	Pb-free Halide free	Active	IGBT	1	5.5	35	5000 / 5000	30	30	70	SOIC-16

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

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