

Product Overview

NUD3105: Relay Driver, 5.0 V, Single

For complete documentation, see the data sheet.

This device is used to switch inductive loads such as relays, solenoids incandescent lamps and small DC motors without the need of a free-wheeling diode. The device integrates all necessary items such as the MOSFET switch, ESD protection, and Zener clamps. It accepts logic level inputs thus allowing it to be driven by a large variety of devices including logic gates, inverters and microcontrollers.

Features

- Provides a Robust Driver Interface Between DC Relay Coil and Sensitive Logic Circuits
- Optimized to Switch Relays from 3.0 V to 5.0 V Rail
- Capable of Driving Relay Coils Rated up to 2.5 W at 5.0 V
- Internal Zener Eliminates the Need of Free-Wheeling Diode
- Internal Zener Clamp Routes Induced Current to Ground for Quieter Systems Operation
- Low $V_{DS(on)}$ Reduces System Current Drain

Applications

- Relay Switching
- Inductive Load Switching

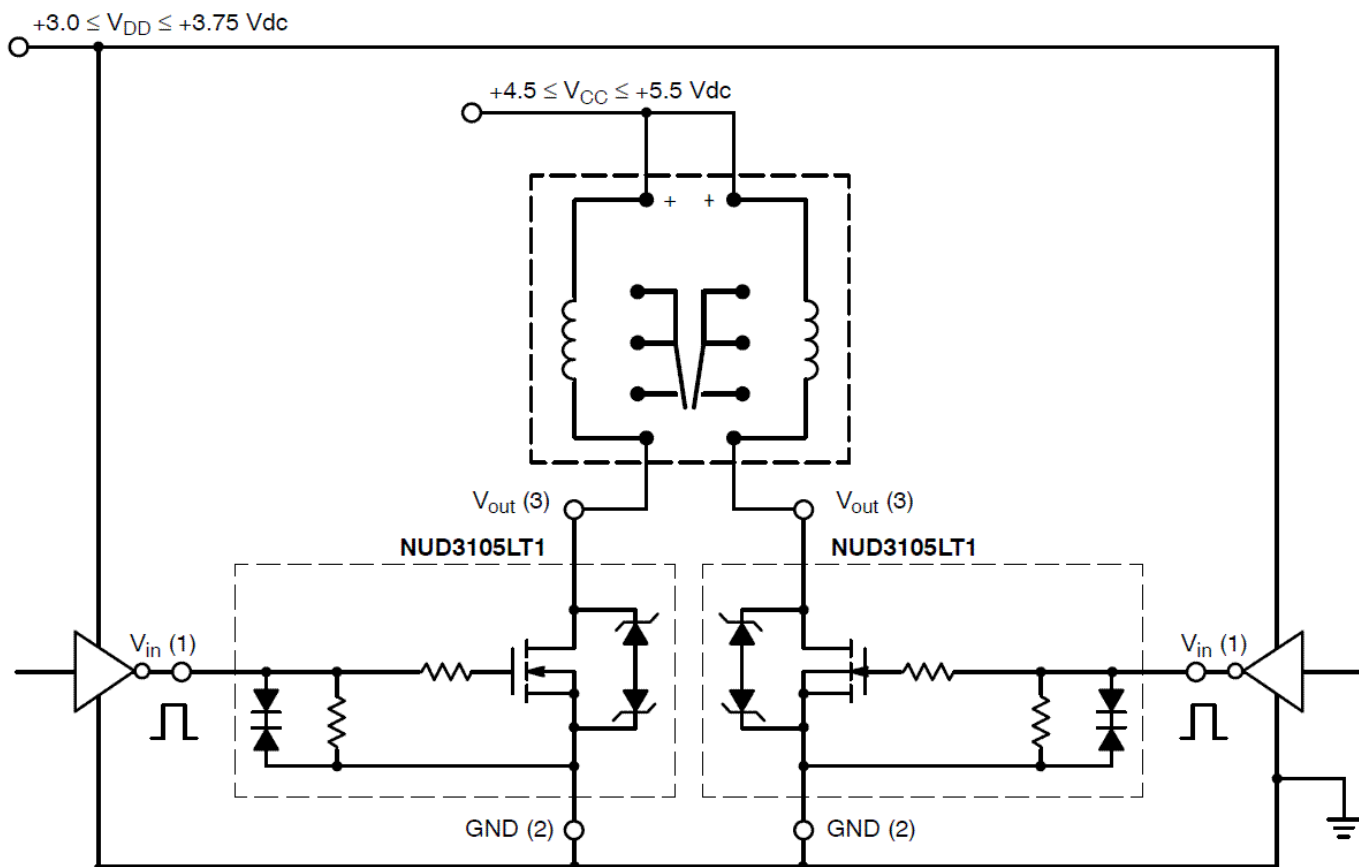
End Products

- Line Cards, Modems, Answering Machines, FAX
- Photocopiers, Printers, Desktop Computers
- TVs and VCRs, Stereo Receivers, CD Players, Cassette Recorders
- Small Appliances, Security Systems, Automated Test Equipment, Garage Door Openers
- 5.0 V Driven Relays, Motor Controls, Power Latches, Lamp Drivers

Part Electrical Specifications

Product	Compliance	Status	Number of Drivers	V_{CC} Max (V)	$V_{(BR)IGSS}$ Max (V)	$V_{(BR)DSS}$ Max (V)	I_D Max (A)	$r_{DS(on)}$ Max (Ω)	T_J Max ($^{\circ}$ C)	Package Type
NUD3105LT1G	Pb-free	Active	1	6	6	6	0.5	0.9	150	SOT-23-3
	Halide free									

Application Diagram



**A 200 mW, 5.0 V Dual Coil Latching Relay Application
with 3.0 V Level Translating Interface**

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

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