

## Product Overview

### MDC3105: Relay Driver, 5.0 V

For complete documentation, see the data sheet.

This Relay Driver is intended to replace an array of three to six discrete components with an integrated SMT part. It can be used to switch 3 to 6 Vdc inductive loads such as relays, solenoids, incandescent lamps and small DC motors without the need of a free-wheeling diode.

### Features

- Provides a Robust Driver Interface between D.C. Relay Coil and Sensitive Logic Circuits
  - Optimized to Switch Relays from a 3 V to 5 V Rail
  - Capable of Driving Relay Coils Rated up to 2.5 W at 5 V
  - Features Low Input Drive Current and Good Back-to-Front Transient Isolation
  - Internal Zener Eliminates Need for Free-Wheeling Diode
  - Internal Zener Clamp Routes Induced Current to Ground for Quieter System Operation
  - Guaranteed Off State with no Input Connection
  - Supports Large Systems with Minimal Off-State Leakage
  - ESD Resistant in Accordance with the Class 1C Human Body Model
  - Low Sat Voltage Reduces System Current Drain by Allowing Use of Higher Resistance Relay Coils
- For more features, see the data sheet

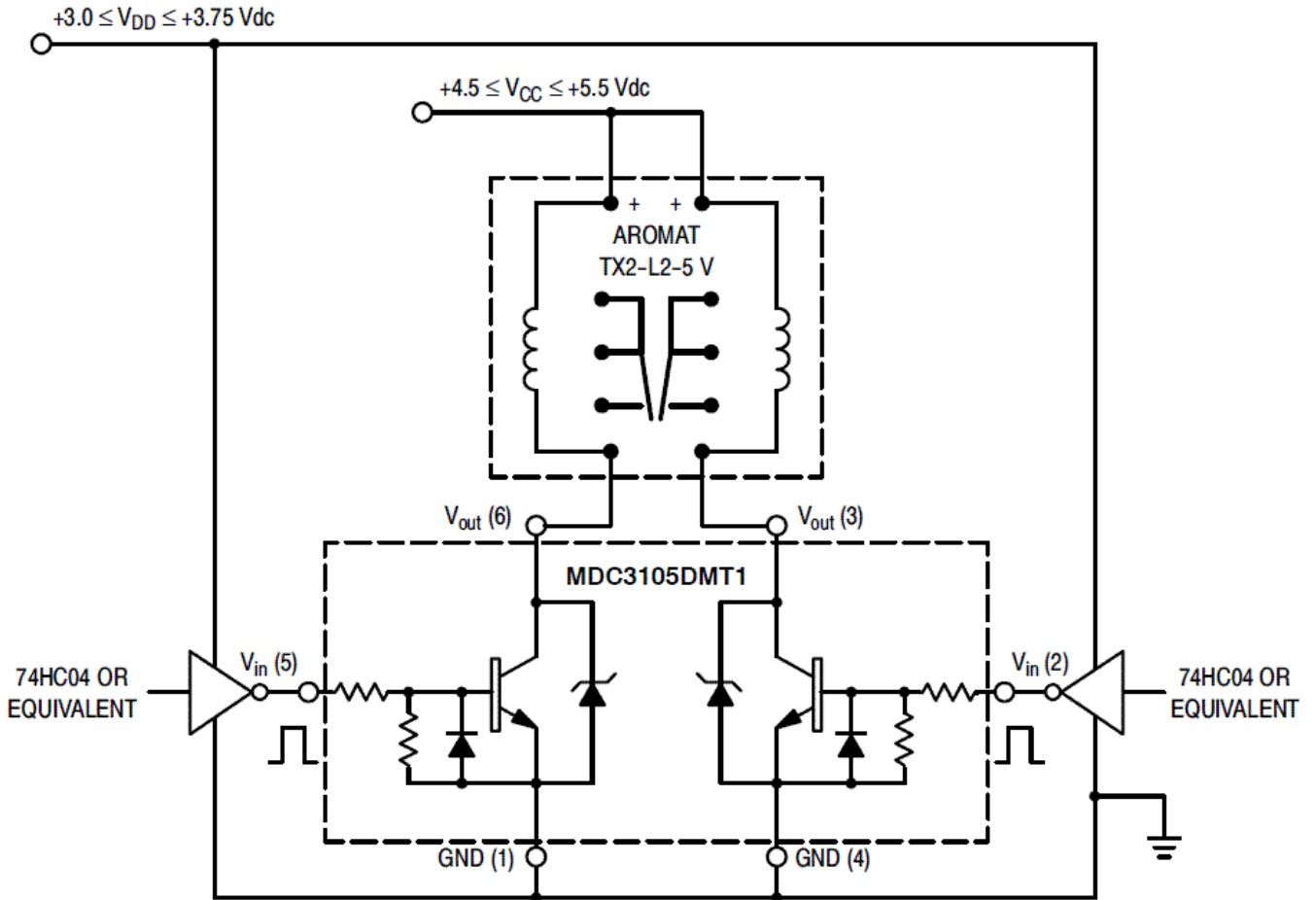
### Applications

- Telecom: Line Cards, Modems, Answering Machines, FAX Machines, Feature Phone Electronic Hook Switch
- Computer & Office: Photocopiers, Printers, Desktop Computers
- Consumer: TVs and VCRs, Stereo Receivers, CD Players, Cassette Recorders, TV Set Top Boxes
- Industrial: Small Appliances, White Goods, Security Systems, Automated Test Equipment, Garage Door Openers
- Automotive: 5.0 V Driven Relays, Motor Controls, Power Latches, Lamp Drivers

### Part Electrical Specifications

Product	Compliance	Status	Number of Drivers	V <sub>CC</sub> Max (V)	V <sub>(BR)GSS</sub> Max (V)	V <sub>(BR)DSS</sub> Max (V)	I <sub>D</sub> Max (A)	r <sub>DS(on)</sub> Max (Ω)	T <sub>J</sub> Max (°C)	Package Type
MDC3105DMT1G	Pb-free	Active	2	6	6	6.6	0.4	0.64	150	SC-74
	Halide free									
MDC3105LT1G	Pb-free	Active	1	6	6	6.6	0.4	0.64	150	SOT-23-3
	Halide free									

# Application Diagram



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

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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