



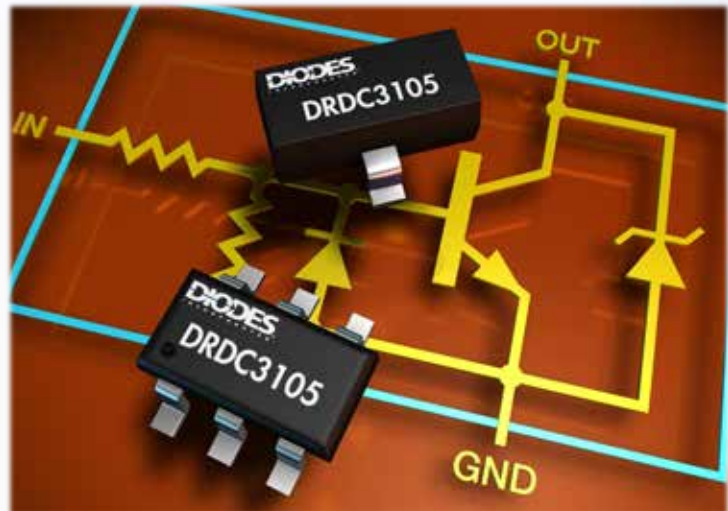
Integrated Relay Driver simplifies the switching of Inductive Loads

The DRDC3105 integrates a solid-state relay driver into a single package for switching inductive loads up to 0.5A.

Enabling 3 to 5V logic level signals to switch coils, by acting as a robust buffer stage between the sensitive logic circuits and that of 3 to 6V DC inductive relay coils. With a low input drive current requirement, the DRDC3105 only has slight loading on the input circuitry and it will provide good transient isolation between output and input channels.

The relay driver is offered in single and dual driver configurations, housed respectively in SOT23 and SOT26 packages, and can replace between 3 and 6 discrete components. DRDC3105 minimises footprint, reduces component count and improves reliability by fully integrating a rugged inductive coil driver into a single package.

For samples and quotations please contact your nearest Diodes sales office or representative.



The Diodes' Advantage

DRDC3105 is a fully integrated relay driver for switching inductive loads up to 2.5W such as DC relays, solenoids, incandescent lamps, and small DC motors.

§ Fully integrated

Monolithic integration of several discrete components into single die which reduces number of components, minimises footprint, and improves reliability.

§ Integrated Zener

Clamps the inductive voltage to 6.6V and routes the induced coil current to ground this making a quieter system operation by reducing EMI noise. This eliminates the need for an external free-wheeling diode.

§ Logic level input

Designed for CMOS and TTL level input with good transient isolation between output-input which protects sensitive input circuitry, whilst also guaranteed to enter off-state condition when input is disconnected.

§ Low Saturation BJT

Enables currents up to 0.5A to be driven through the coil whilst on and near-zero power to be consumed whilst in off-state.

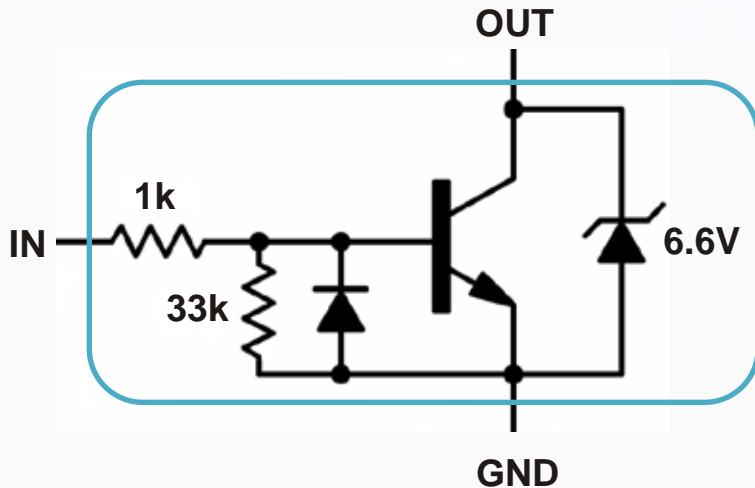
§ Rugged design

Inherently robust BJT technology with ESD protection and automotive qualified to AEC-Q101.



Fully Integrated Relay Driver

Solid-state relay driver by monolithic integration of several discrete components.



SOT23
Single Driver



SOT26
Dual Driver

Cross Reference

Part Number	Description	On-Semi
DRDC3105FTA	SOT23 Single Relay Driver	MDC3105L / T1 / T1G
DRDC3105E6TA	SOT26 Dual Relay Driver	MDC3105D / MT1 / MT1G

Applications

Driver of inductive coils in relays, latches, solenoids, lamps and small motors:

Automotive	5V Driven Relays, Lamp Drivers, Motor Controls
Computing	Computers, Printers
Telecoms	Modems, Terminal Adaptors, Line Cards, End User Equipment
Consumer	White Goods, Thermostats, LCD & Plasma TVs,
Industrial	Process control, ATE equipment, Solar Inverters