



## TLE 4247EL40

### Constant Current Relay Driver

The current consumption of a relay is determined by the permanently applied coil current which is actually only required during activation. The AEC-Q100 qualified TLE 4247 significantly reduces the overall coil current consumption by minimizing the relay's coil current after activation to a value which is required to keep the relay activated (40-60mA). The TLE 4247 is coming in a small PG-DSO-8 Exposed-Pad package and can be mounted on a PCB inside a relay or on a ECU-PCB.

#### Application

- Automotive relays
  - Integrated into relay housing
  - Mounted on ECU-PCB
- Automotive electromagnetic actuators
  - e.g. ignition key interlock

#### Key Features

- High coil activation current
- Low hold current
- Usage together with low- or high-side switch
- PG-DSO-8 EP

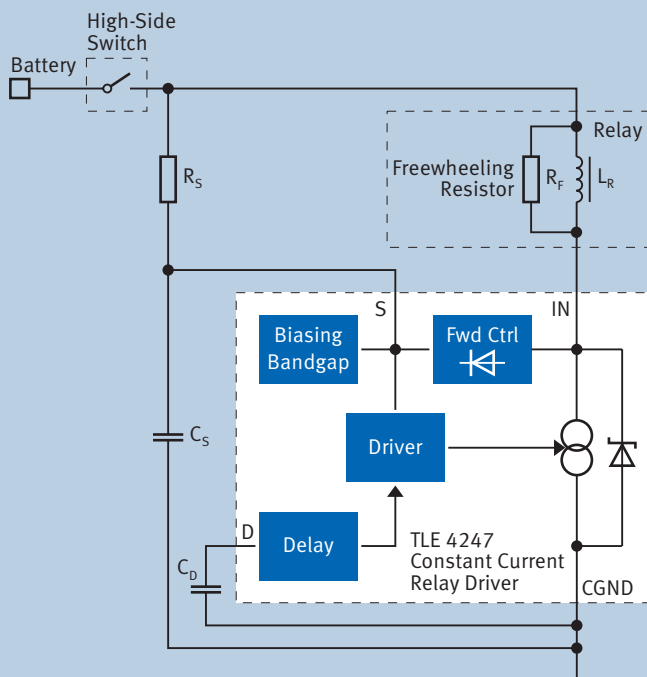
#### Key Benefits

- Coil current independent from battery voltage variation
- No EMI, unlike PWM relay driving
- 2-pole device is floating during switch-off (coil energy absorbed by the switch)

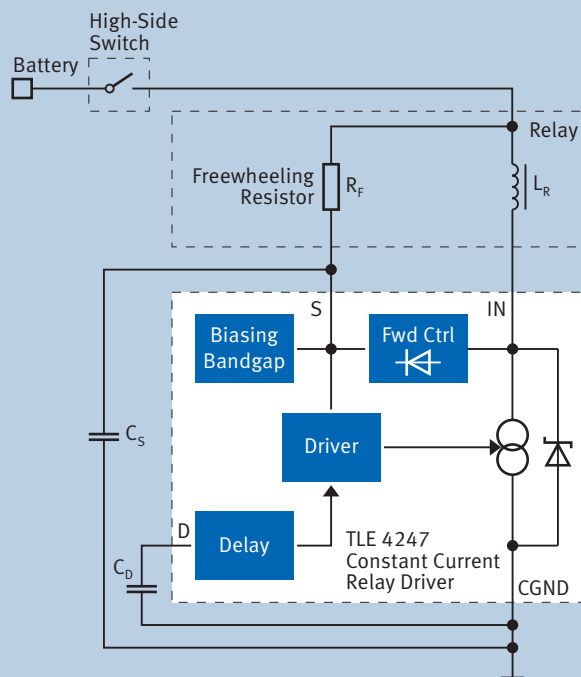
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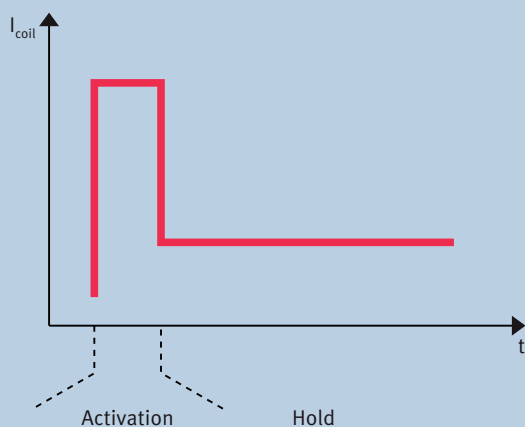
TLE 4247 Supplied by External Source



TLE4247 Supplied by Freewheeling Resistor



Note: TLE4247 can be used together with a low-side switch as well.



### Operating Modes

- Operating as a Switch
  - **Activation Mode:** E.g. for activation of a relay
  - **High Voltage Mode:** Limitation of power dissipation during double battery
  - **Low Voltage Mode:** Minimum drop and lowest current consumption
- Operating as a Constant Current Source
  - **Hold Mode:** During operation after activation time has been elapsed

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