

■ General Description

The OCH29801 is an integrated Hall sensor with H-Bridged output driver designed for brushless DC motor applications. The device is using HV process includes an on-chip Hall sensor for magnetic sensing, an amplifier that amplifies the Hall voltage, a comparator to provide switching hysteresis for noise rejection, a bi-directional drivers for sinking and driving large current load.

Placing the device in a variable magnetic field, if the magnetic flux density is larger than threshold BOP, the DO is turned to sink and DOB is turned to drive. This output state is held until the magnetic flux density reverses and falls below BRP, then causes DO to be turned to drive and DOB turned to sink.

OCH29801 is available in SOT23-6F package and is rated over the -40°C to 85°C.

■ Features

- One-chip Solution (Hall Element + Driver)
- Input Voltage Range: 3V to 20V
- Low Output Switching Current Noise
- Built-in VCC To GND reverse voltage protection
- High Sensitivity Hall Sensor
BOP (25GS), BRP (-25GS)
- Thermal Shutdown Protection
- -40°C to + 85°C Temperature Range
- RoHS Compliant
- Available in SOT23-6F package

■ Applications

- Single Coil Design Cooling Fans
- Single Coil DC Brushless Fan
- Single Coil DC Brushless Motor
- Office Automated Equipment
- Brown-Goods
- Home Applications
- Car Audio Cooling Fan

■ Pin Configuration

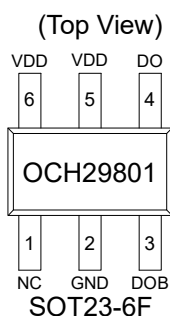
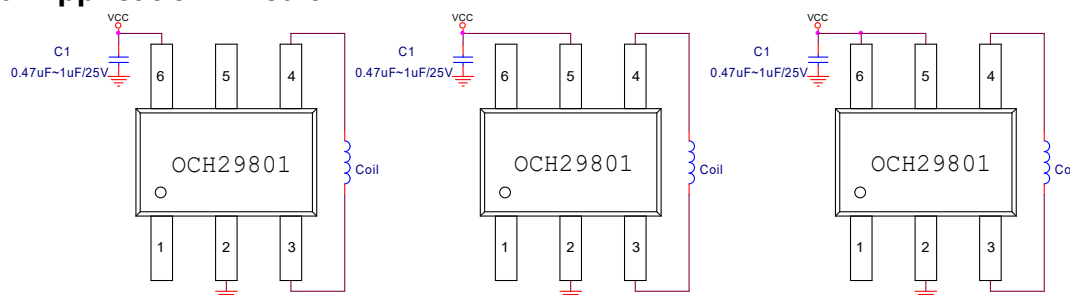


Figure 1, Pin Assignments Of OCH29801

| Pin Name | Pin No. | Pin Function |
|----------|---------|-----------------------|
| NC | 1 | NC Pin |
| GND | 2 | Ground |
| DOB | 3 | Output 1 |
| DO | 4 | Output 2 |
| VDD | 5、6 | Positive Power Supply |

■ Typical Application Circuit



Note1: When the power pulse is relatively large, Must use least C1=0.47~1µF (ceramic capacitor) capacitor for the decoupling between VDD and GND and place the capacitor as close to the IC as Possible.

Figure 2, Typical Application Circuit of OCH29801



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■ Block Diagram

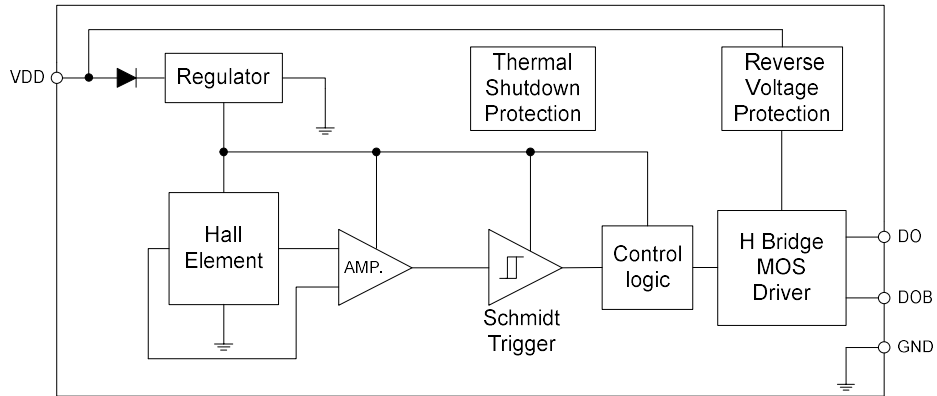


Figure 3, Block Diagram Of OCH29801