

ORIENT-CHIP

■ General Description

The OCH29831H is an integrated Hall sensor with H-Bridged output driver designed for brushless DC motor applications. The device is using high voltage BCD 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. OCH29831H built-in power supply reverse connection protection circuit enables the OCH29831H do no need for external reverse diode in application, can reducing the fan cost. OCH29831H is available in SIP-4L package and is rated over the -40°C to 125°C.

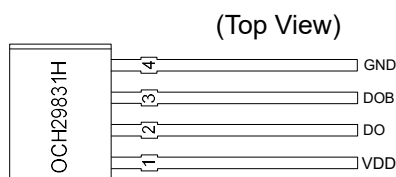
■ Features

- Built-in VCC to GND reverse voltage protection
- Low Output Switching Current Noise
- One-chip Solution(Hall Element+Driver)
- Input Voltage Range:3.5V to 28V
- High Sensitivity Hall Sensor BOP(20GS),BRP(-20GS)
- Thermal Shutdown Protection
- Lock-shutdown Protection & Auto-Restart Function
- $R_{DS(ON)}$:1.8Ω
- RoHS Compliant
- Available in SIP-4L(TO94) package

■ Applications

- Single Coil Design Cooling Fan
- Single Coil DC Brushless Motor

■ Pin Configuration



SIP-4L

Figure 1, Pin Assignments of OCH29831H

Pin Name	Pin No.	Pin Function
V _{DD}	1	Positive Power Supply
DO	2	Output 1
DOB	3	Output 2
GND	4	Ground

■ Typical Application Circuit

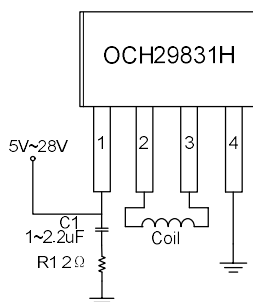


Figure 2, Typical Application Circuit Of OCH29831H

Note1: When the power pulse is relatively large, must use least C1=1~2.2μF ceramic capacitor and R1=2Ω(Typ.) for the decoupling between VDD and GND and place the capacitor as close to the IC as possible.



■ Block Diagram

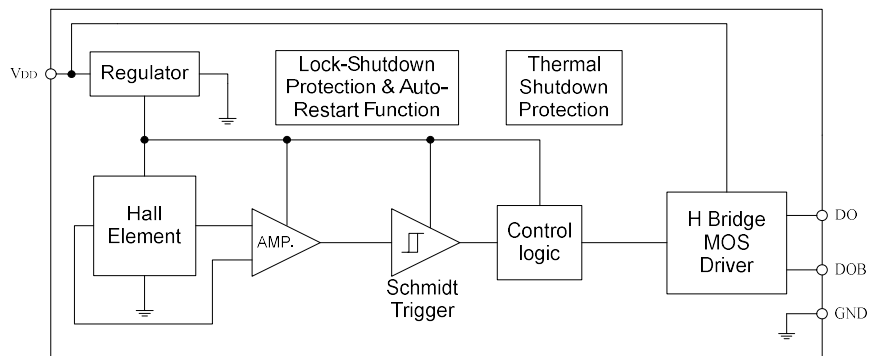


Figure 3, Block Diagram Of OCH29831H