



ORIENT-CHIP

General Description

The OCH9166E 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 driver 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.

OCH9166E is available in SIP-4L package and is rated over the -40°C to 105°C.

Features

- One-chip Solution (Hall Element + Driver)
- Input Voltage Range: 2.5V to 20V
- Start Voltage 1.9V(min.)
- Continuous Output Current: 500mA
- High Sensitivity Hall Sensor BOP15GS、BRP-15GS
- Soft Switch
- Lock-shutdown protection & auto-restart function
- Thermal Shutdown Protection
- Low Output Switching Current Noise
- -40°C to +105 °C Temperature Range
- RoHS Compliant
- Available in SIP-4L(TO94) Packages

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

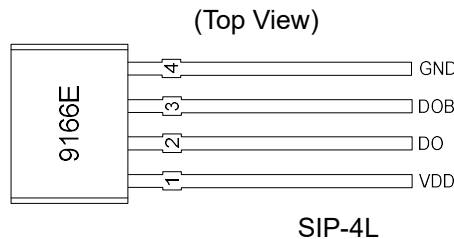


Figure 1, Pin Assignments Of OCH9166E

Pin Name	Pin No.	Pin Function
VDD	1	Positive Power Supply
DO	2	Output 1
DOB	3	Output 2
GND	4	Ground

Typical Application Circuit

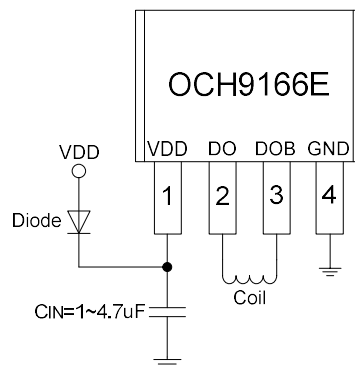


Figure 2, Typical Application Circuit Of OCH9166E



■ Block Diagram

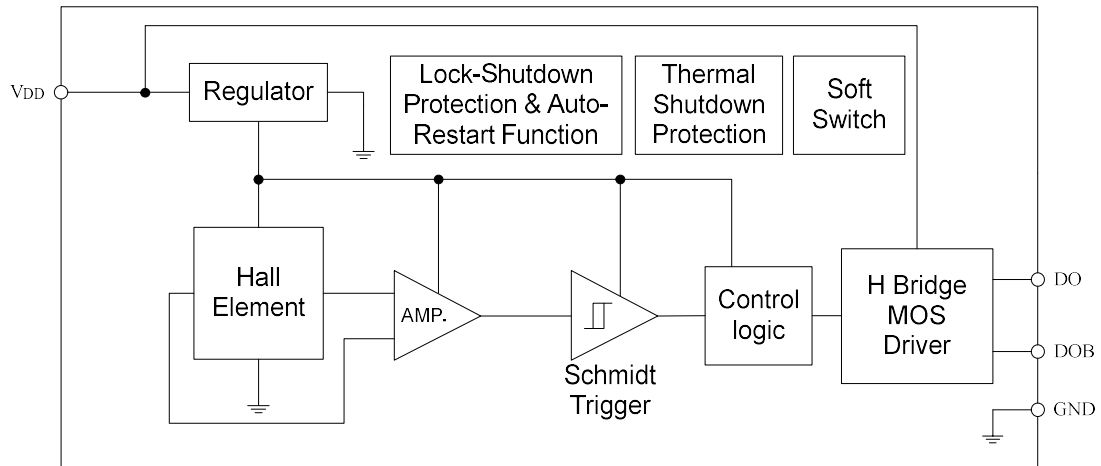


Figure 3, Block Diagram Of OCH9166E