■ General Description

The OCH1801 families of Hall-effect latches are AEC-Q100 qualified for 12V automotive applications .These sensors are temperature-stable and suited for operation over extended junction temperature ranges up to 150°C. The OCH1801 families are available in several different magnetic sensitivities to offer flexible options for system design. They are available in active high and active low variants for ease of integration into electronic subsystems. The OCH1801 series feature a Planar and vertical Hall-effect sensing element sensitive to magnetic flux the face of the IC package. The devices include on-board reverse-battery and overvoltage protection for operating directly from an automobile battery, as well as protection from shorts to ground by limiting the output current until the short is removed. The device is especially suited for operation from unregulated supplies.

The OCH1801series available in SOT23-3Land SIP3L package.. Both packages are lead (Pb) free, with 100% matte-tin-plated leadframes.

■ Features

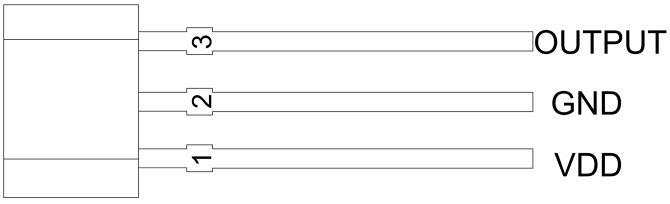
- AEC-Q100 qualified
- Vertical Hall-effect sensor IC
- Wide operating voltage range: 3.0V~28V
- Operating temperature range: -40°C ~ +150°C
- Internal protection circuits enable 40 V load dump compliance
- Output short-circuit and over voltage protection
- Temperature compensation
- Reverse polarity protection
- Open-Drain pre-driver
- Package: SIP-3L、SOT23-3L

Applications

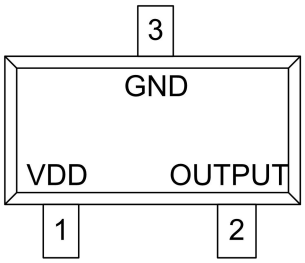
- Automotive and industrial safety systems
- Industrial motors/encoders
- Trunk/door/liftgate/wiper motors
- Electronic power steering (EPS)
- Brush-less DC Motor
- Speed measurement
- Revolution countine

■ Pin Configuration

(Top View)



SIP-3L



SOT23-3L

Name	No.		Status	Description
	SIP-3L	SOT23-3L		
VDD	1	1	P	IC Power Supply
GND	2	3	P	IC Ground
OUTPUT	3	2	O	It is low state during the S magnetic field

■ Application Circuit

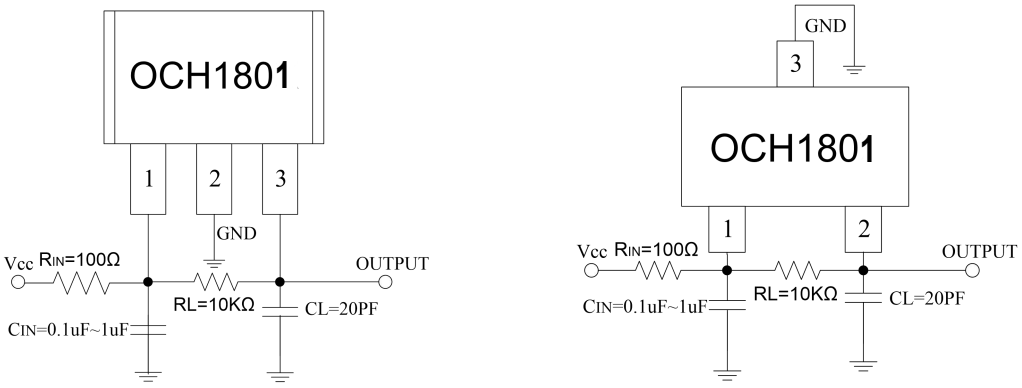


Figure 1, application circuit

- Note: C_{IN} is for power stabilization and to strengthen the noise immunity, the recommended capacitance is 0.1~1uF. If the Vcc power supply is clean, the C_{IN} can be cancelled. RIN cannot be omitted. When VOUT and VCC are not on the same power supply，VOUT power supply does not exceed the power supply voltage.

■ Ordering Information

PartNumber	Package Type	Sensing Orientation	Packing Qty	B_{OP} (Gauss)	B_{RP}(Gauss)	Temperature	Eco Plan	Lead
OCH1801MF	SIP-3L	Y-Axis	1000pcs	30(Typ.)	-30(Typ.)	-40~ 150°C	ROHS	Cu
OCH1801SWAF	SOT23-3L	X-Axis	3000pcs	30(Typ.)	-30(Typ.)	-40~ 150℃	ROHS	Cu