



### General Description

The OCH15300 is an X-axis omnipolar sensor. The device using High Voltage process includes an on-chip Hall voltage generator for magnetic sensing, a comparator that amplifies the X-axis Sensor voltage, and a Schmitt trigger to provide switching hysteresis for noise rejection, and an open-drain output. An internal band-gap regulator is used to provide temperature compensated supply voltage for internal circuits and allows a wide operating supply range.

### Features

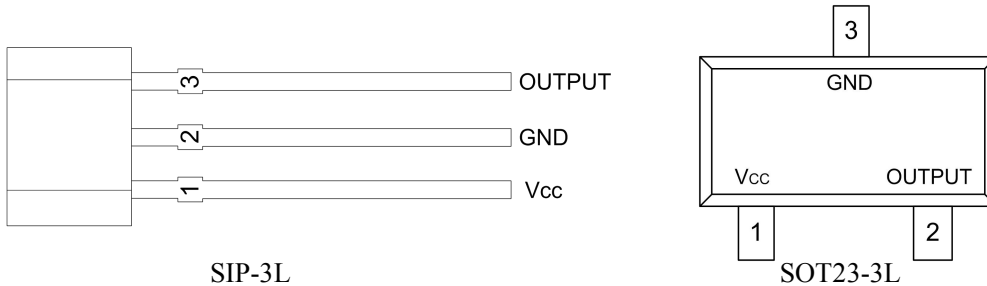
- Wide operating voltage range: 3V~40V
- Operating temperature range: -40°C ~+150°C
- Temperature compensation
- Reverse polarity protection
- Open-drain pre-driver
- Package: SIP-3L、SOT23-3L

### Applications

- Liquid level measurement
- Proximity switch
- Speed measurement

### Pin Configuration

(Top View)



Pin Name	Pin Number		Description
	SIP-3L	SOT23-3L	
V <sub>CC</sub>	1	1	IC Power Supply
GND	2	3	IC Ground
OUTPUT	3	2	Output PIN

### Application Circuit

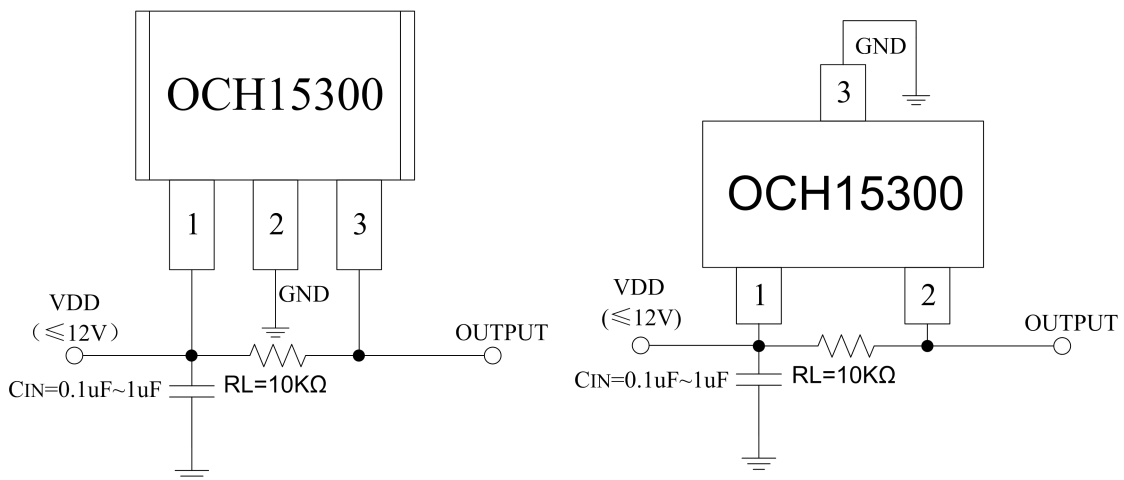


Figure 1, Application circuit

Note: When  $V_{DD} \leq 12V$ ,  $C_{IN}$  is for power stabilization and to strengthen the noise immunity, the recommended capacitance is 0.1~1uF.

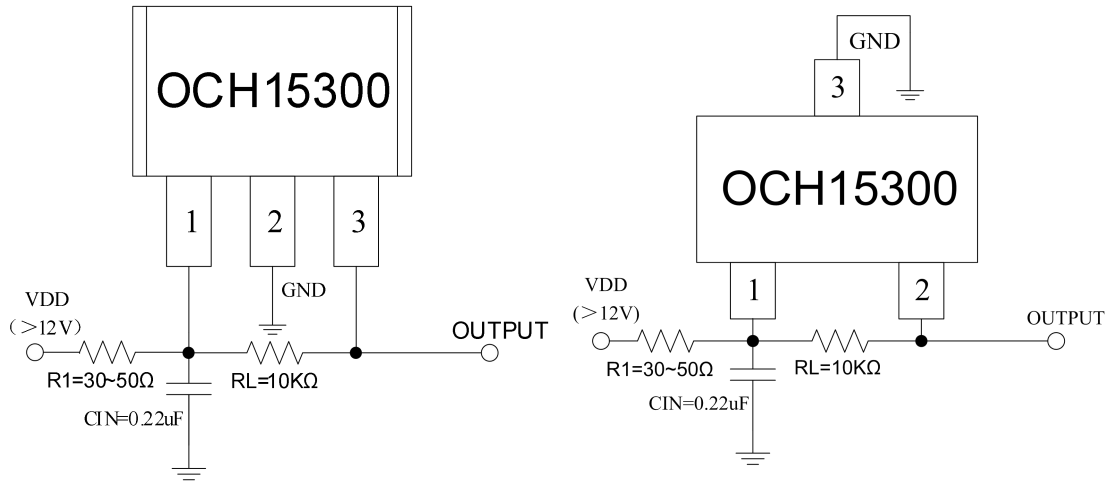


Figure 2, Application circuit

Note: When  $VDD > 12V$ ,  $C_{IN}$  and  $R1$  are designed to stabilize power and enhance noise immunity, the recommended capacitance is  $0.22\mu F$ , The recommended resistance is  $30\sim 50\ \Omega$ .

■ **Ordering Information**

Part Number	Package Type	Packing Qty	$B_{OP}$ (Gauss)	$B_{RP}$ (Gauss)	Temperature	Eco Plan	Lead
OCH15300MF	SIP-3L	1000pcs	$\pm 55$ (Typ.)	$\pm 35$ (Typ.)	-40~ 150°C	RoHS	Cu
OCH15300WAF	SOT23-3L	3000pcs	$\pm 55$ (Typ.)	$\pm 35$ (Typ.)	-40~ 150°C	RoHS	Cu

■ **Block Diagram**

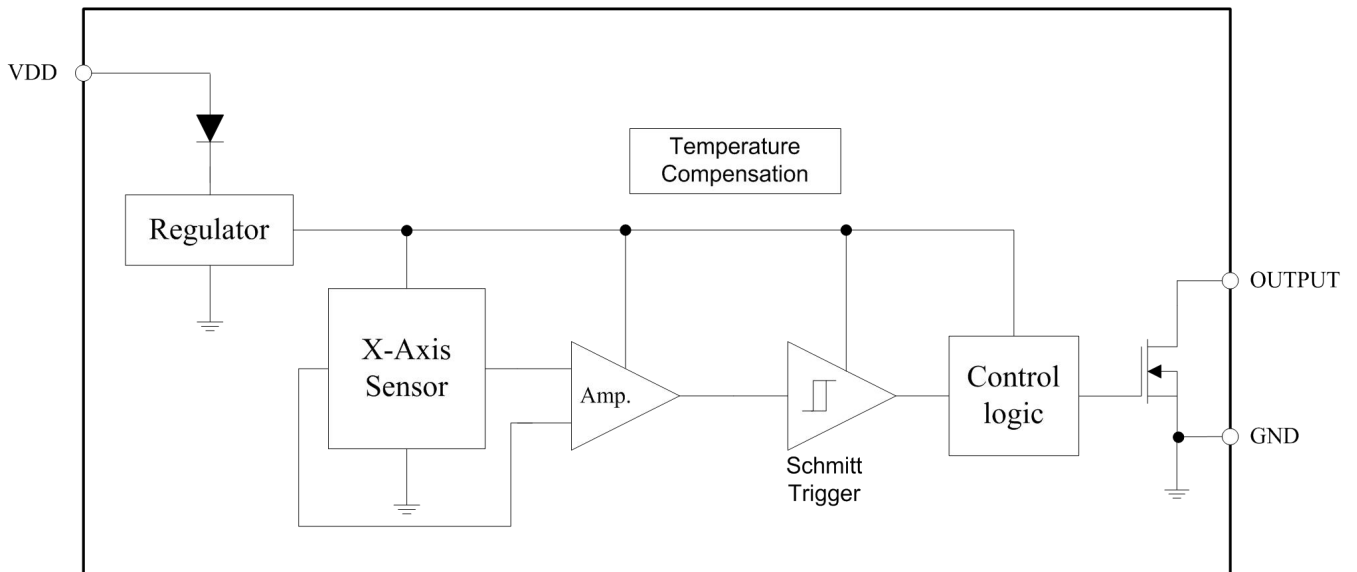


Figure 3, Block Diagram Of OCH15300