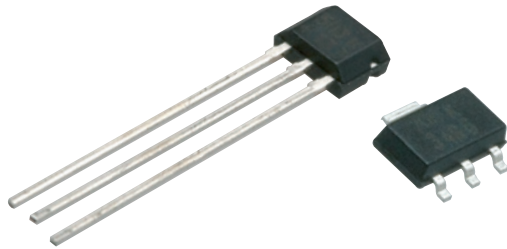


LOW-COST HALL-EFFECT SENSOR FAMILY HAL® 1xy



These **Hall sensors** are produced in CMOS technology and include a temperature-compensated Hall plate with active offset compensation, a comparator, and an open-drain output transistor. The comparator compares the actual magnetic flux through the Hall plate (Hall voltage) with the fixed reference values (switching points). Accordingly, the output transistor is switched on or off.

	PART NUMBER	MAGNETIC CHARACTERISTICS B_{ON} (mT), TYP. @ 25°C	MAGNETIC CHARACTERISTICS B_{OFF} (mT), TYP. @ 25°C	TYPE	CONFIGURATION	PACKAGE
Specifications of HAL 1xy Series						
HAL 101	34.0	24.0	unipolar, low sensitivity	3-wire	T092 / SOT89	
HAL 102	2.6	-2.6	latching, high sensitivity	3-wire	T092 / SOT89	
HAL 103	7.6	-7.6	latching, medium sensitivity	3-wire	T092 / SOT89	
HAL 104	14.0	-14.0	latching, low sensitivity	3-wire	T092 / SOT89	
HAL 106	12.0	6.5	unipolar, high sensitivity	3-wire	T092 / SOT89	
HAL 107	26.5	22.5	unipolar, low sensitivity	3-wire	T092 / SOT89	
HAL 108	17.0	15.0	unipolar, medium sensitivity	3-wire	T092 / SOT89	
HAL 109	7.9	5.7	unipolar, high sensitivity	3-wire	T092 / SOT89	

FEATURES

- » Temperature ranges:
 - C (commercial): 0°C ... +85°C
 - I (industrial): -20°C ... +125°C
- » Supply voltage: 3.8 V ... 24 V
- » Operates with static magnetic fields and dynamic fields up to 10 kHz
- » Overvoltage protection at all pins
- » Reverse-voltage protection at V_{DD} pin

APPLICATIONS

- » White goods:
 - Selector switches
 - Door lock detection
 - RPM detection
- » Power tools
 - Speed control
 - Direction switch
- » Home automation
 - Garage/door opener
- » Industrial applications
 - Endposition detection
 - RPM measurement
 - Brushless DC motors
 - RPM measurements in flow meters
 - Replacement of micro switches

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