

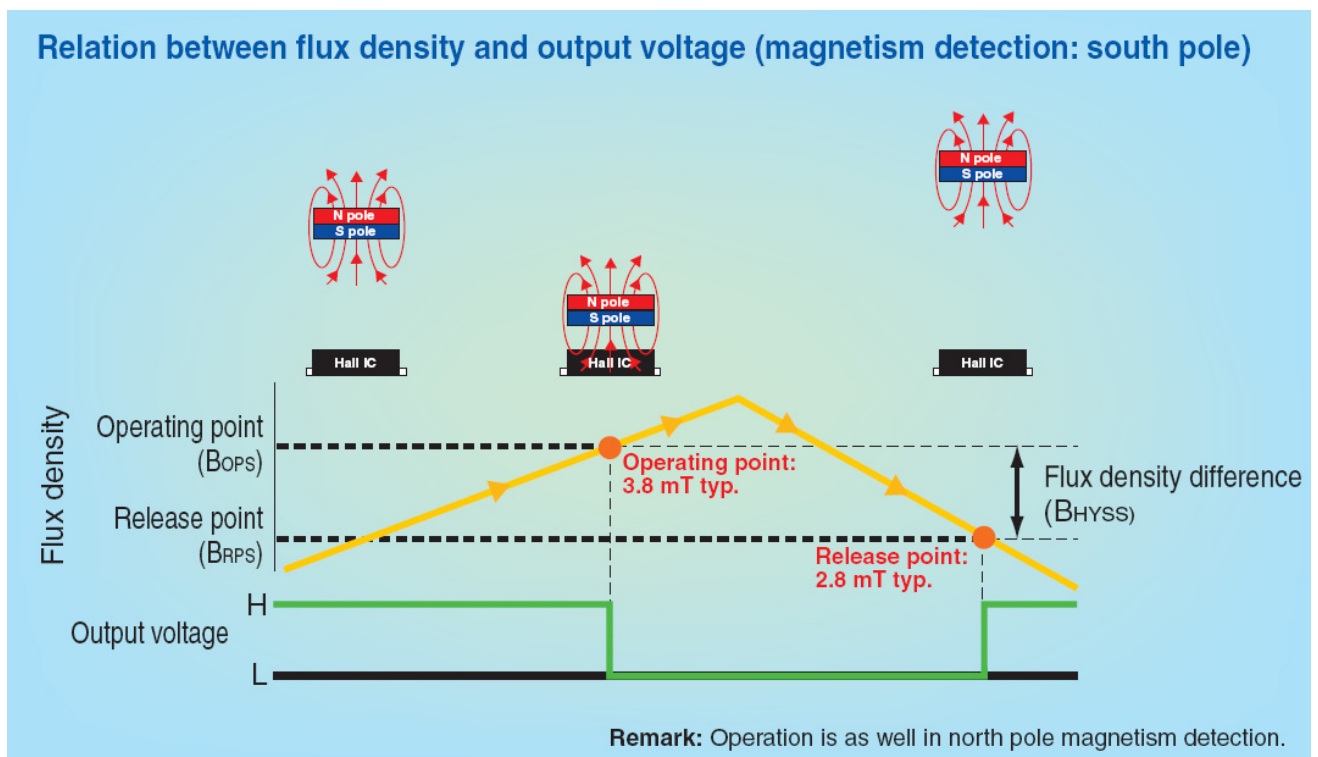
# Press Release

## Hall IC S-5711A Series

<b>High sensitivity:</b>	<b>± 3.8mT Operating point; ±2.8mT Release point</b>
<b>Wide supply voltage range:</b>	<b>2.4V...5.5V</b>
<b>Low power consumption:</b>	<b>5.0µA typ.; 8.0µA max.</b>
<b>Small SNT-4A package:</b>	<b>1.6x1.2x0.48mm<sup>3</sup></b>

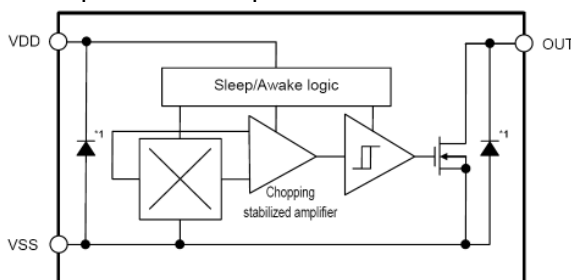
### The new Hall Sensor Switch IC is completely designed in Low Power CMOS

thus very low in power consumption. Wide supply voltage range of 2.4V to 5.5V, only 5.0µA typical and 8.0µA maximum supply current and a high magnetic flux sensitivity of 3.8mT, operating point and 2.8mT, release point, achieved by utilizing a chopper stabilized amplifier make it a unique integrated circuit with superior functionality.



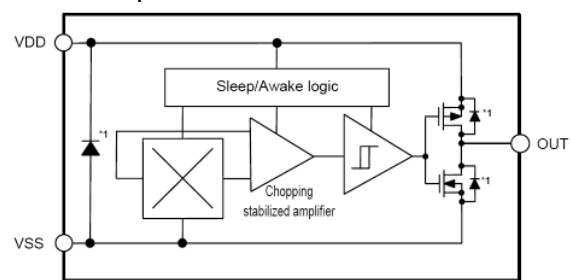
The detector is capable of sensing both north- and south- poles. The presence of a magnetic flux exceeding the operate level of 3.8mT will change the state of the output to "Low" with both available CMOS or N-channel open drain output configuration. Reducing flux density to below 2.8mT will alter the state of the device with CMOS output to "High", the N-ch open drain to high impedance, which can be turned into a logical "High" with the aid of an external pull-up resistor to V<sub>DD</sub> thereby permitting wired-or connections with other N-ch open drain devices.

#### N-ch open drain output



\*1. Parasitic diode

#### CMOS output



\*1. Parasitic diode

The operating temperature range is from -40°C...+85°C and there is only a very small dependency of the switching levels from ambient temperature. The same holds true for the sleep mode and awake mode timings.

**Package image**

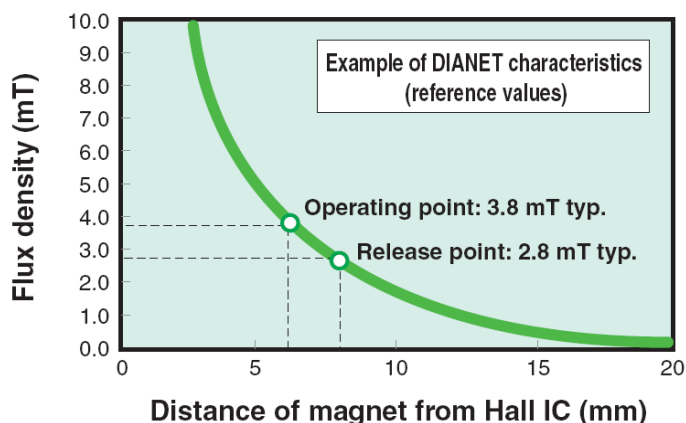
Packaging in a super small SNT-4A package facilitates high density mounting necessary for many



Package size (mm)			Pitch (mm)
Hε	D	A (max.)	C
1.6	1.2	0.5	0.65

applications. In near future SOT-23-3 will become available as an alternative package.

**Magnets** to actuate the Hall sensor are also available from Seiko Instruments. The DIANET Sm2Co17 DM-30 with a diameter of 3.0mm and a height of 1.0mm is one of the approved examples.



**Applications:**

- Open / Close detection
- Proximity detection
- Access control
- Level detection
- Safety switching, contactless switching bears inherent explosion-proof

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