

NEWS RELEASE

PR0112E

ALPS Develops and Commences Mass Production of “HGPRDT Series” High-Precision Latch 2-Phase Type Magnetic Sensor*Extensive Range for Automotive Applications Supports High Temperatures and Voltages*

Duesseldorf, Germany, February 02, 2012 – ALPS ELECTRIC EUROPE GmbH has developed the HGPRDT Series high-precision latch 2-phase output type magnetic sensor for use in automotive equipment, supporting a wide operating temperature range between –40°C and +140°C, and high voltages up to 30V. Mass production commenced in January 2012.

Electronics are increasingly being incorporated into automobiles in order to achieve greater advancements in safety, comfort and convenience. As a result, more onboard automotive systems are electronically controlled, and numerous sensors are being incorporated to detect and control functioning of motor-driven systems used, for example, in moving parts of power windows and car navigation displays. But in addition to the ability to withstand the high temperatures, vibrations and other impacts typically associated with automotive environments, such sensors must be long-lasting and highly resistant to dust and dirt.

The existing HGPFFT Series high-precision magnetic sensor offers excellent durability and reliability, as well as a long operating life, and can be used as a non-contact encoder. ALPS has now developed the new HGPRDT Series high-precision magnetic sensor for automotive equipment supporting high temperatures and high voltages. Mass production is already underway.

ALPS is currently bolstering its line-up of sensors tailored to a broad range of markets, from automobiles and industrial equipment through to consumer devices.

The integrated circuit (IC) inside the HGPRDT Series was designed in-house at the Sendai R&D Center (Sendai, Miyagi Prefecture). Having already introduced a wide variety of sensors, ALPS was able to draw upon its extensive know-how relating to sensors acquired through experience in the market to develop the best IC for automotive equipment. The IC is designed to ensure maximum functionality even in the high-temperature and high-voltage environments that automotive equipment is subjected to. The result is an operating temperature range between -40°C and $+140^{\circ}\text{C}$, the maximum temperature having been extended from $+115^{\circ}\text{C}$. The maximum supply voltage has also been increased to 30V from 5.5V.

The HGPRDT Series also houses two high-precision sensing elements, allowing detection of rotation speed and direction at the same time. This helps to reduce the number of sensors required for a non-contact encoder and to save space inside automotive equipment.

*The sensor generates two on/off signals as the magnetic field applied alternates between north and south polarity.

Features

HGPRDT Series high-precision magnetic sensor for automotive applications, supporting high temperatures and high voltages

1. Wide operating temperature range (-40°C to $+140^{\circ}\text{C}$) and wide supply voltage range (3V to 30V).
2. Two elements in one package enable detection of rotation speed and direction with a single package.
3. Use of high-sensitivity elements ensures reliability with gap variations (differences in mounting precision), improving design flexibility.
4. 3mA low current consumption.

Principal Applications

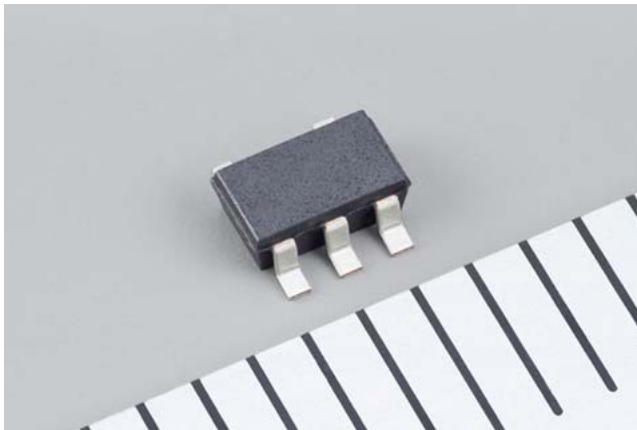
Control of motors for automotive equipment or industrial machinery, etc.

Specifications

Product name	HGPRDT Series
Dimensions (W x D x H)	2.9mm x 2.8mm x 1.1mm
Operating temperature	-40°C to +140°C
Supply voltage	3V to 30V
Current consumption	3mA
Magnetic sensitivity	+1mT \pm 0.7mT (Off > On) -1mT \pm 0.7mT (On > Off)
Response frequency	Continuous drive
Output signal	Open drain
Output current	10mA

For more information on the new product please visit

http://www.alps.com/products/e/npv_product/120131_HGPRDT/HGPRDT_E.PDF



ALPS Electric Co., Ltd.

ALPS Electric (Tokyo: 6770) is a leading global manufacturer of high-quality electronic components for mobile devices, home electronics, vehicles and industrial equipment. With the philosophy of "Perfecting the Art of Electronics" ALPS Electric supplies over 40,000 different components to about 2,000 companies all over the world. For more information, visit www.alps.com.

ALPS ELECTRIC EUROPE GmbH, a subsidiary of ALPS Electric Co., Ltd., was established in 1979. Since 1989 the European Head Office has been located in Düsseldorf, where a team of specialists works in Sales, Marketing, and Product Engineering. The activities of our branch offices in Munich, Paris, Milton Keynes, Gothenburg, and our sales office in Milan are coordinated from Düsseldorf.

Contact:

ALPS ELECTRIC EUROPE GmbH

Phone.: +49-211-59 77-0

Fax: +49-211-59 77-146

Email: info@alps-europe.com

Internet: www.alps.com

PR Agency:

MEXPERTS AG

Kurt Loeffler / Peter Gramenz

Phone.: +49-89-897361-0

Fax: +49-89-87 29 43

Email: kurt.loeffler@mexperts.de

Internet: www.mexperts.de

Press Portal: www.presseagentur.com

This news release and a press photo are available electronically at
<http://www.presseagentur.com/alps/en/>