

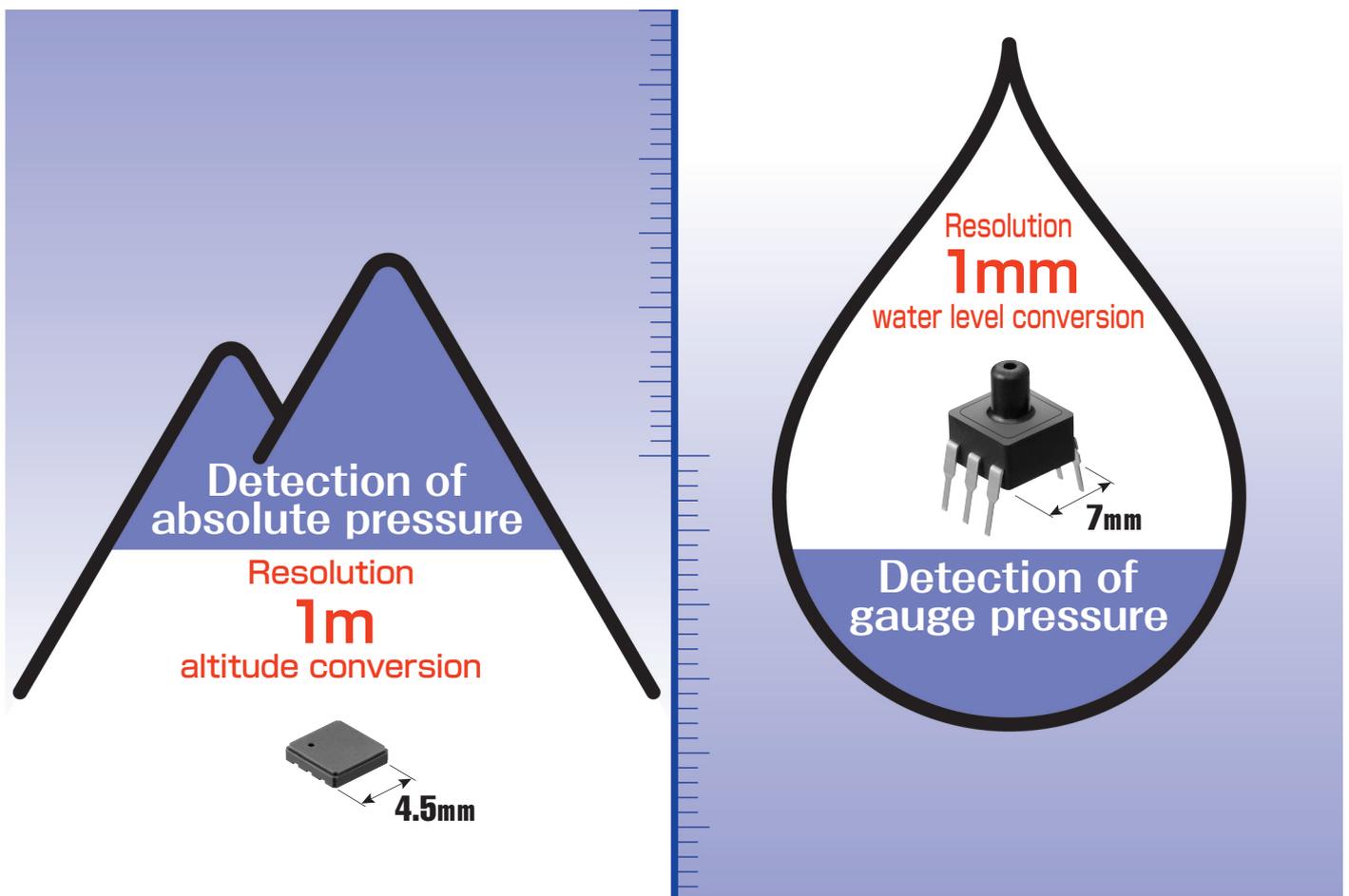
# Piezoresistive Type Pressure Sensor (to Detect Absolute and Gauge Pressure)

HSPP Series

**ALPS**<sup>®</sup>

New  
2007

## Compact size/ high resolution (0.01kPa)



Compact size/Thin shape developed through the integration of thin-film processing technology, precision processing technology and packaging technology.  
Realization of high resolution detection with optimization of digital circuit and thermal correction circuit.

- Realization of compact size and thin shape with employing piezoresistive type.
- Two types, detection of both absolute and gauge pressure.
- Low-power consumption

Alps offers miniaturization in high resolution pressure sensing.

# Piezoresistive Type Pressure Sensor (to Detect Absolute and Gauge Pressure)

HSPP Series



For detection of absolute pressure

For detection of gauge pressure

**It helps expand design flexibilities of set products for compact sized. Advantage in high resolution. Two types pressure sensors, both absolute and gauge pressure.**

## Applications

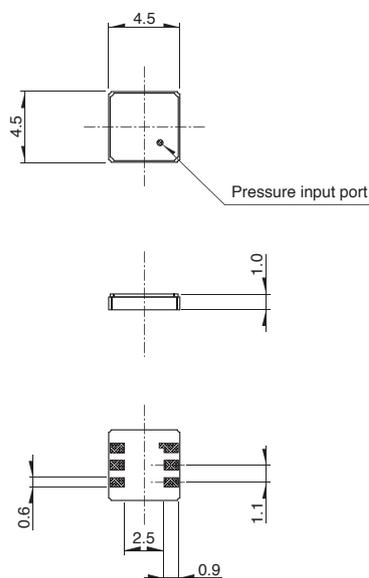
**Detection of barometrical or pneumatic pressure, in portable navigation devices, washing machines, dishwashers etc.**

## Typical Specifications

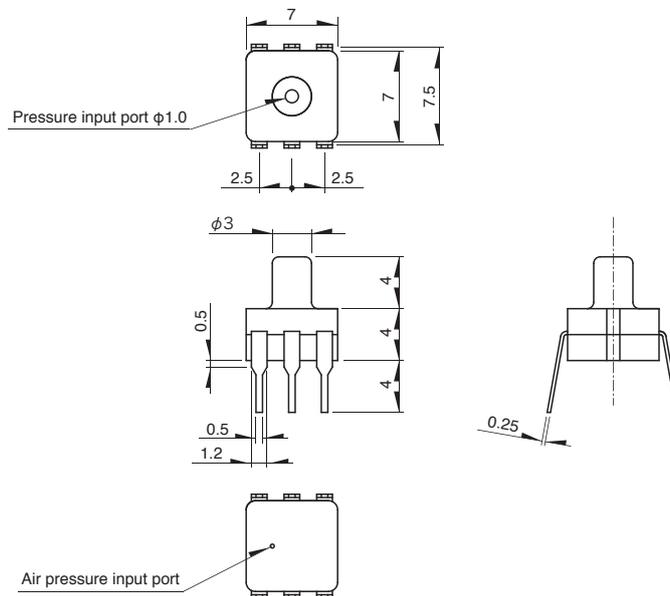
Items	Specifications	
Type of Pressure	Absolute pressure	Gauge pressure
Dimensions (W×D×H)	4.5×4.5×1.0mm	7.0×7.0×8.0mm
Operating temperature	-40 to +85°C	
Operating voltage	2.7 to 5.5V	
Output voltage	0 to 5.0V (at supply voltage of 5V)	
Measurable pressure range	60kPa to 110kPa (altitude conversion : 4,000 to -700m)	±5kPa
Resolution	0.01kPa	

## Dimensions

For detection of absolute pressure



For detection of gauge pressure



Unit:mm

## Cautions for Use

1. Specification indicated in this catalog is outline only. When employing the product, use of an officially authorized specification for supply contract is recommended.
2. Unless specifically indicated otherwise, products in this catalog have been designed and manufactured for use in ordinary electronic equipment and devices, such as AV equipment, electric home appliances, office machines, and communications equipment. Equipment manufacturers are consequently advised that when these products are planned for equipment that requires a high degree of safety and reliability, especially those apparatuses like medical equipment, aviation and aircraft equipment, space equipment, and burglar alarm equipment, the manufacturers should assure equipment safety by providing protection circuits and redundant circuitry and should fully study the suitability of such products for the intended equipment.
3. The external appearance, performances, and other properties of the product may be changed for improvement without prior notice. The product introduced in this catalog may discontinue being produced without prior notice.
4. All product names, company names and names of standards described in this catalog are trademarks or registered trademarks of their respective owners.
5. Please contact us for any enquiries and queries on our products and their uses.
6. This catalog is valid till the end of December 2007.

## Inquiries about Products

Products Information Center +81 (3) 5499-8154  
Products Catalog Site <http://www3.alps.com>

**ALPS**<sup>®</sup>  
**ALPS ELECTRIC CO., LTD.**  
1-7, Yukigaya-otsuka-cho, Ota-ku, Tokyo, 145-8501