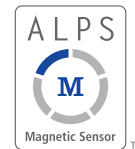
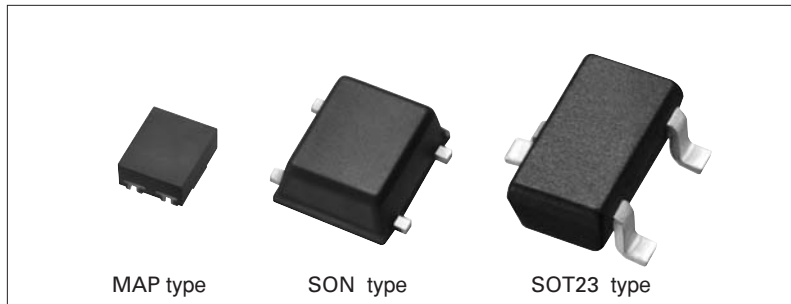


# Magnetic Sensors Switching Output Type

HGDE□/HGDF□ Series

Various product lineup contributes set design flexibility . High precision, compact and low profile product based on magnetic sensing devices technologies.



Magnetic Sensor

Piezo Sensor

Resistive Sensor

### Features

- Compact and low-profile (1.3×0.9×0.55mm for the MAP Type).
- Low current consumption (3.0μA at VDD=1.8V.).
- Various lineups (drive voltage, functions, operating magnetic field and package specifications).

### Applications

- Detects Open and Close of lids and doors of any industrial equipments and amusement equipments.

### Typical Specifications

Items	Specifications	
	HGDE□	HGDF□
Drive voltage	Typ. 1.8V (1.6V min. to 3.6V max.)	Typ. 5V (4.5V min. to 5.5V max.)
Current consumption	3μA Ave. (at VDD=1.8V)	Typ. 1.65mA (at VDD=5V)

### Product list

Drive voltage	Package specifications/Size	Function	Model No.	Operating magnetic field(Hon)	
Typ.1.8V	MAP type 1.3×0.9×0.55mm	Single polarity/ Single output	HGDESM022A	2.0mT	
			HGDESM032A	3.0mT	
		Dual polarity/ Single output	HGDEPM022A	2.0mT	
			HGDEPM032A	3.0mT	
		Dual polarity/ Dual output	HGDEDM022A	2.0mT	
			HGDEDM032A	3.0mT	
	SON type 2.1×2.1×0.75mm	Single polarity/ Single output	HGDESN021A	2.0mT	
			HGDESN031A	3.0mT	
		Dual polarity/ Single output	HGDEPN021A	2.0mT	
			HGDEPN031A	3.0mT	
		Dual polarity/ Dual output	HGDEDN021A	2.0mT	
			HGDEDN031A	3.0mT	
SOT23 type 2.9×2.8×1.1mm	Single polarity/ Single output	HGDEST021A	2.0mT		
		HGDEST031A	3.0mT		
	Dual polarity/ Single output	HGDEPT021A	2.0mT		
		HGDEPT031A	3.0mT		
	Typ.5V	SON type 2.1×2.1×0.75mm	Single polarity/ Single output	HGDFSN021A	2.0mT
				HGDFSN031A	3.0mT
Dual polarity/ Single output			HGDFPN021A	2.0mT	
			HGDFPN031A	3.0mT	
Dual polarity/ Dual output		HGDFDN021A	2.0mT		
		HGDFDN031A	3.0mT		
SOT23 type 2.9×2.8×1.1mm	Single polarity/ Single output	HGDFST021A	2.0mT		
		HGDFST031A	3.0mT		
Dual polarity/ Single output	HGDFPT021A	2.0mT			
	HGDFPT031A	3.0mT			

Dimensions

Unit:mm

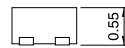
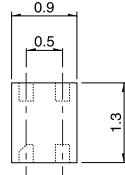
Magnetic  
 Sensor

Piezo  
 Sensor

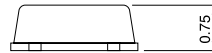
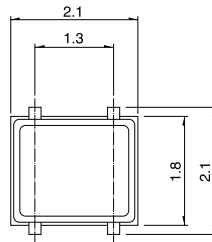
Resistive  
 Sensor

Style

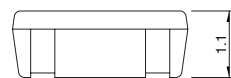
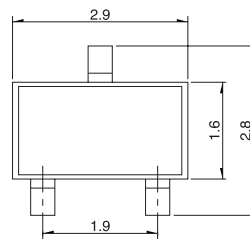
MAP type



SON type



SOT23 type



# Mouser Electronics

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## ALPS:

[HGDEPT031A](#) [HGDEST021A](#) [HGDEPN031A](#) [HGDEST031A](#) [HGDEDN021A](#) [HGDESN031A](#) [HGDEPN021A](#)  
[HGDESN021A](#) [HGDFSN021A](#) [HGDEDM023A](#) [HGDEPM023A](#)