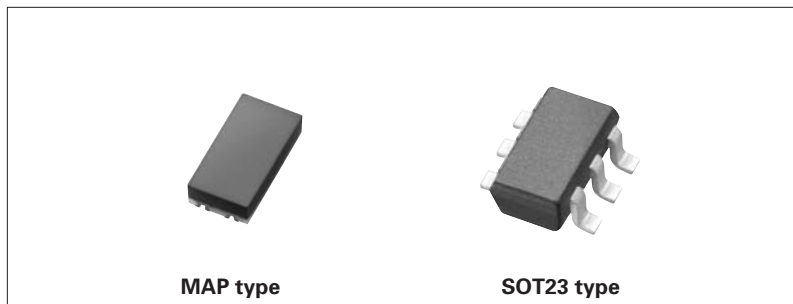


# Magnetic Sensors Incremental Encode Output Type

HGP□D Series

**Built-in 2-phase output in a small sized package. Contributes to making the encoder system smaller and to increasing the design flexibility.**



Magnetic Sensor

Piezo Sensor

Resistive Sensor

## Features

- Has a built-in high sensitivity and high precision two phase output
- Small size (1.8V type 2×1×0.55mm).
- Low consumption current (1.8V type total 20μA for two phases).

## Applications

- Detection of rotation speed and rotation direction for rotation mechanisms of small motors and actuators, etc., as well as dial input of all kinds of portable devices such as mobile phones and digital cameras.

## Typical Specifications

Items	Specifications		
	HGPJDM	HGPHDM	HGPFDT
Operating voltage	Typ. 1.8V (1.6V min. to 3.6V max.)		Typ. 5V (4.5V min. to 5.5V max.)
Sampling period	1.3m sec	320μ sec	35μ sec
Current consumption	20μ A Ave. (at VDD= 1.8V)	70μ A Ave. (at VDD= 1.8V)	4mA Ave. (at VDD= 5V)
2-phase element interval	Typ. 0.65mm		

## Product list

Operating voltage	Package Specifications/Size	Function	Model No.	Operating magnetic field
Typ. 1.8V	MAP type 2×1×0.55mm	2-phase alternating output Sampling period : 1.3msec	HGPJDM001A	Hon:+1mT Hoff:-1mT
		2-phase alternating output Sampling period : 320μ sec	HGPHDM001A	
Typ. 5V	SOT23 type 2.9×2.8×1.1mm	2-phase alternating output Sampling period : 35μ sec	HGPFDT001A	

## Dimensions

Unit:mm

Style	
<p><b>MAP type</b></p>	<p><b>SOT23 type</b></p>