

Magnetic Sensor Switching Output Type

HGDE□/HGDF□ Series

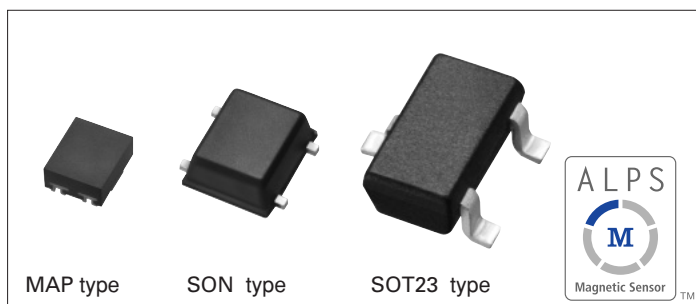


Various product lineup contributes set design flexibility . High precision, compact and low profile product based on magnetic sensing devices technologies.

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Piezo
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Typical Specifications

Items	Specifications	
	HGDE□	HGDF□
Drive voltage	Typ. 1.8V (1.6V min. ~ 3.6V max.)	Typ. 5V (4.5V min. ~ 5.5V max.)
Current consumption	3 μ A Ave. (at VDD=1.8V)	Typ. 1.65mA (at VDD=5V)
Operating temperature range	-40°C ~ +85°C	

Product list

Drive voltage	Package specifications/Size	Function	Minimum order unit (pcs.)	Model No.	Operating magnetic field(Hon)
Typ. 1.8V	MAP type 1.3×0.9×0.55mm	Single polarity/ Single output	3,000	HGDESM023A	2.0mT
		Dual polarity/ Single output		HGDEPM023A	
		Dual polarity/ Dual output		HGDEDM023A	
	SON type 2.1×2.1×0.75mm	Single polarity/ Single output		HGDESN021A	
		Dual polarity/ Single output		HGDEPN021A	
		Dual polarity/ Dual output		HGDEDN021A	
	SOT23 type 2.9×2.8×1.1mm	Single polarity/ Single output		HGDEST021B	
		Dual polarity/ Single output		HGDEPT021B	
		Dual polarity/ Dual output		HGDFSN021A	
Typ. 5V	SON type 2.1×2.1×0.75mm	Single polarity/ Single output	3,000	HGDFPN021A	2.0mT
		Dual polarity/ Single output		HGDFDN021A	
		Dual polarity/ Dual output		HGDFST021B	
	SOT23 type 2.9×2.8×1.1mm	Single polarity/ Single output		HGDFST021B	
		Dual polarity/ Single output		HGDFST021B	
		Dual polarity/ Single output		HGDFPT021B	

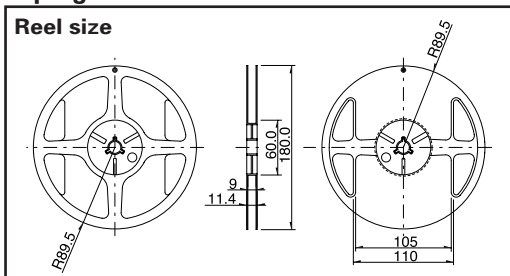
Notes

※ Operating magnetic field is compatible with both high-sensitive and low-sensitive types. Please contact us for details.

Packing Specifications

Taping

Unit:mm



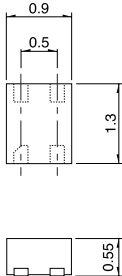
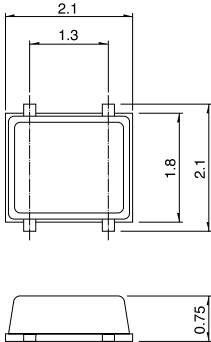
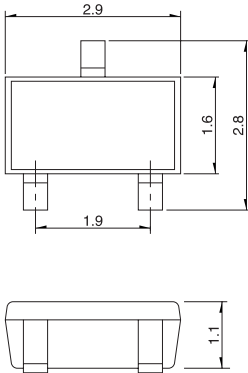
Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case /Japan	1 case /export packing		
3,000	3,000	45,000	8	210×210×230

Notes

Please place purchase orders per minimum order unit N (integer).



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Dimensions	Unit:mm
Style	
MAP type	
SON type	
SOT23 type	

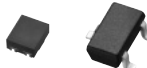
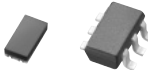
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Index for Functions

Style	Series	Photo	Type	Package / Size		Function	Drive voltage	Operating magnetic field	Page
Magnetic	HGDE□		Switching output (Detection switch)	MAP	1.3×0.9×0.55mm	Single Polarity / Single Output	Typ.1.8V	Hon 2.0/3.0mT	507
						Dual Polarity / Single Output			
						Dual Polarity / Dual Output			
				SON	2.1×2.1×0.75mm	Single Polarity / Single Output			
						Dual Polarity / Single Output			
						Dual Polarity / Dual Output			
	SOT23	2.9×2.8×1.1mm	Single Polarity / Single Output						
			Dual Polarity / Single Output						
			Dual Polarity / Single Output						
	HGDF□			SON	2.1×2.1×0.75mm	Single Polarity / Single Output			
						Dual Polarity / Single Output			
						Dual Polarity / Dual Output			
				SOT23	2.9×2.8×1.1mm	Single Polarity / Single Output			
						Dual Polarity / Single Output			
Dual Polarity / Single Output									
HGDFPA□		Switching output (Connector Connection Model)	14×9×5mm		Dual Polarity / Single Output (open collector output)		—	509	
HGP□P		Latch output type (direction of rotation)	MAP	1.3×0.9×0.55mm	1-phase alternating output Sampling period 1.3msec	Typ.1.8V	Hon 1mT/Hoff -1mT	510	
			SOT23	2.9×2.8×1.1mm	1-phase alternating output Sampling period 35μsec	Typ.5V			
HGP□D		Incremental encoding output (direction of rotation/rotation direction)	MAP	2×1×0.55mm	2-phase alternating output Sampling period 1.3msec	Typ.1.8V		511	
			SOT23	2.9×2.8×1.1mm	2-phase alternating output Sampling period 35μsec	Typ.5V			
HGAR□		Linear analog output (Rotation detection)	2×1.5×0.65mm		Output:Typ.±75mV (rotation angle±30°)	1.5 ~ 5.5V	—	512	
Geomagnetic	HSCD□		Geomagnetic detection	2.5×2.5×0.7mm		Output resolution 0.5 μT/LSB	Ana:2.4 ~ 3.6V Digi:1.7 ~ 2.3V	±0.6mT	513

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