

Magnetic Sensor Analog Linear Output Type

HGAR□ Series



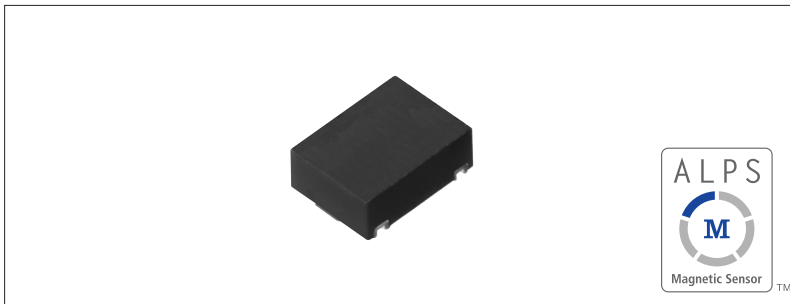
This high output analog output sensor is suited for high resolution detection of absolute angle and position.

Magnetic Sensors

Piezo Sensors

Capacitive Sensor

Resistive Sensors



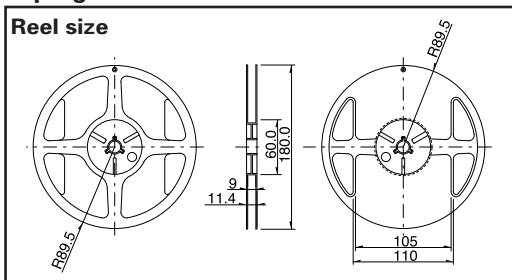
Minimum order unit (pcs.) : 3,000 pcs.

Typical Specifications

Items	Specifications
	HGARAM001A
Supply voltage	1.5 to 5.5V
Output voltage	Typ. $\pm 75\text{mV}$ (3V applied voltage, rotation angle $\pm 30^\circ$)
Average current consumption	0.3mA (3V applied voltage, Duty100%)
Operating temperature range	-40°C to $+115^\circ\text{C}$

Packing Specifications

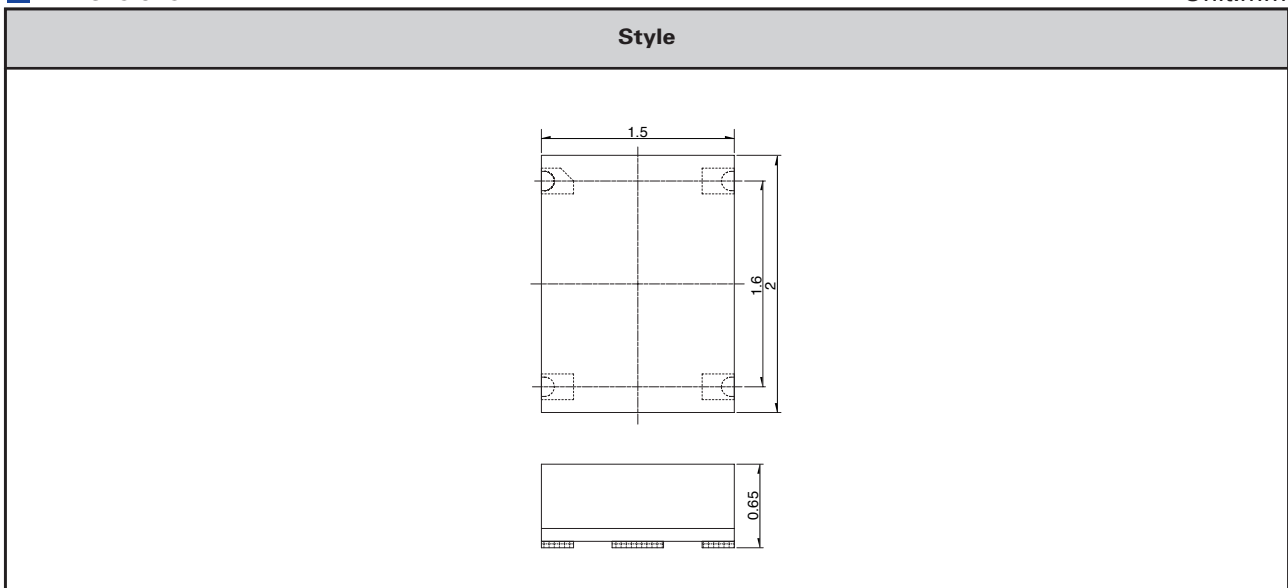
Taping



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

Dimensions

Unit:mm



Note

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



Automotive Use

Index for Functions

Style	Series	Photo	Type	Package / Size		Function	Drive voltage	Operating magnetic field	Automotive use	Page
Magnetic	HGDE□		Switching output (Detection switch)	MAP	1.3×0.9×0.55mm	Single polarity / Single output	Typ.1.8V	Hon 2.0mT		499
						Dual polarity / Single output				
				SON	2.1×2.1×0.75mm	Single polarity / Single output				
						Dual polarity / Single output				
				SOT23	2.9×2.8×1.1mm	Single polarity / Single output				
						Dual polarity / Single output				
	HGDF□	SON	2.1×2.1×0.75mm	Single polarity / Single output	Typ.5V					
				Dual polarity / Single output						
		SOT23	2.9×2.8×1.1mm	Single polarity / Single output						
				Dual polarity / Single output						
HGDFPA□		Switching output (Connector Connection Model)	14×9×5mm	Dual polarity / Single Output (open collector output)	Typ.5V Typ.12V	—		501		
									Snap-in type	14.15×13.2×5mm
HGPP□		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	●	503	
					SOT23					2.9×2.8×1.1mm
	HGPD□		Incremental encoding output (direction of rotation/rotation direction)	MAP	2×1×0.55mm	2-phase alternating output Sampling period 1.3msec				Typ.1.8V
						SOT23				
HGAR□		Linear analog output (Rotation detection)	2×1.5×0.65mm		Output:Typ.±75mV (rotation angle±30°)	1.5 to 5.5V	—	505		
Geomagnetic	HSCD□		Geomagnetic detection	2.5×2.5×0.7mm		Output resolution 0.3 μT / LSB	Ana:2.4 to 3.6V Digi:1.7 to 2.3V	±0.6mT	—	506

Magnetic Sensors

Piezo Sensors

Resistive Sensors

Resistive Sensors

Note

●marks in "Available for automotive use" indicate that all of the series products can work at the operating temperature range from -40°C to +85°C.