KOHDEN

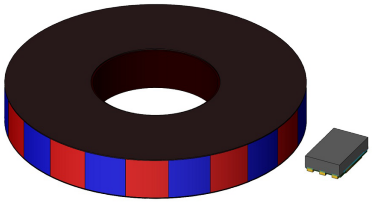
TECHNICAL INFORMATION

Multipolar magnet detection AMR

KG1223-62

Features

- Micro package in offset sensor placement.
- AB phase full bridge.
- Movement to multipole magnet(λ=1 to 3 mm) detect.
- Harmonics suppressed.
- Excellent GAP and alignment characteristics. (Little waveform fluctuation due to misalignment.)
- High response speed. (DC～500kHz ≦)



Absolute maximum rating

Parameter	Value	Unit
Applied voltage	6	VDC
Operating ambient temperature	-30～110	℃
Storage temperature	-40～120	℃

Electromagnetic properties

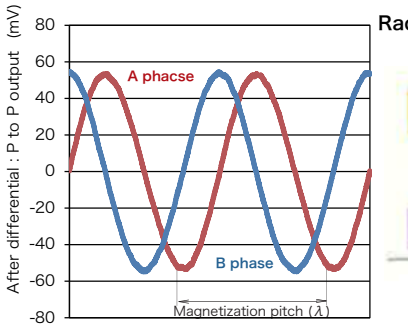
Ta=25℃, Vcc=5V

Parameter	Condition	Value			Unit
		min	typ	max	
Input resistance	Vcc-GND	700	850	1000	Ω
Temperature coefficient of resistance	Operating temperature range	0.2	0.3	0.4	%/℃
Median potential	0 kA/m	2490	2500	2510	mV
Offset voltage	0 kA/m	-10	0	10	mV
P to P output *	|16 kA/m|	45	55	65	mV
Temp. coefficient of P to P output	Operating temperature range |16 kA/m|	-0.2	-0.3	-0.4	%/℃
Temperature coefficient of offset voltage**	Operating temperature range |16 kA/m|	-5	0	5	$\frac{\mu V/Vcc}{℃}$
		-3.5	0	3.5	mV

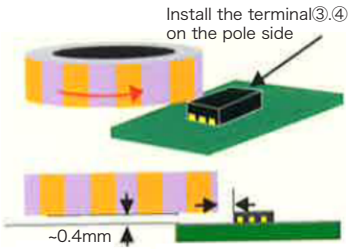
* P to P output : Output of top and bottom peak voltage.(Vpp)

** Temperature coefficient of offset voltage :Average of top and bottm peak voltage.(Vpp/2)

Output waveform example



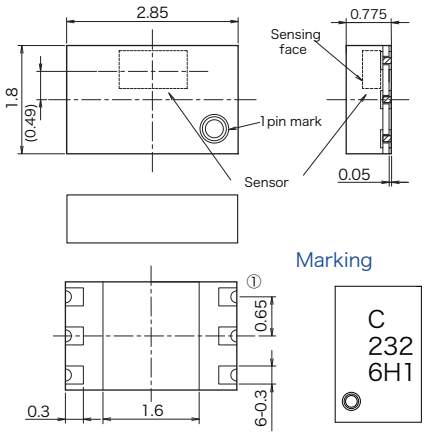
Radial multipole magnet



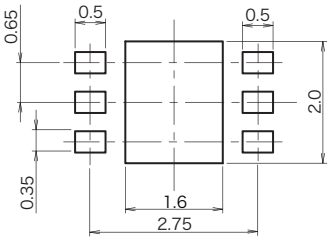
Gap: +0.8mm : 20mT or more

※Detection magnet : ϕ20 Radial 32-pole neodymium(λ=2mm)
Applied voltage : Vcc=5V

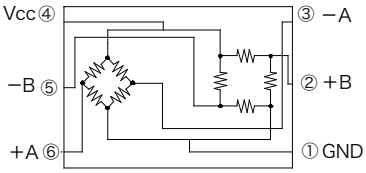
Dimension(unit : mm)



Recommended land layout(unit: mm)



Equivalent circuit



Packing form

Style	Taping
Net	3000pcs/reel

Manufacture and Sales

KOHDEN Co., Ltd.

http://www.hkd.co.jp

Notes

- This product is an AMR sensor for detecting magnetic vectors of multipole magnets with a magnetization pitch λ of 1 to 3 mm.
- We recommend using this product for applications where a magnetic field strength of 8 kA / m (10 mT) or more is always applied.
- Data subject to change without notice.Make it demand specifications to our company, and make it confirm it about this contents when you do purchase, use and design.
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