

## Magnetic sensor

- Hall voltage: typ. 105 mV ( $V_C = 6$  V,  $B = 0.1$  T)
- Input resistance: typ. 0.75 k $\Omega$
- Satisfactory linearity of GaAs hall voltage with respect to the magnetic field
- Small temperature coefficient of the hall voltage:  $\beta \leq -0.06\%/^{\circ}\text{C}$
- Sealed in the Mini type (4-pin) package. Allowing automatic insertion through the taping and the magazine package.

- Various hall motor (VCR, phonograph, VD, CD, and FDD)
- Automotive equipment
- Industrial equipment
- Applicable to wide-varying field (OA equipment, etc.)

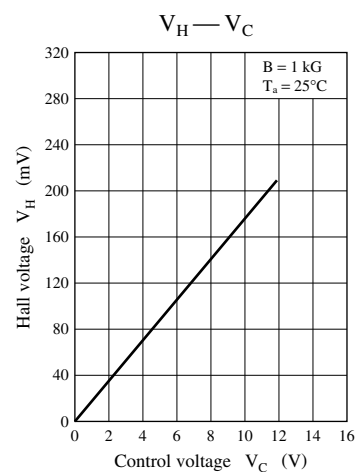
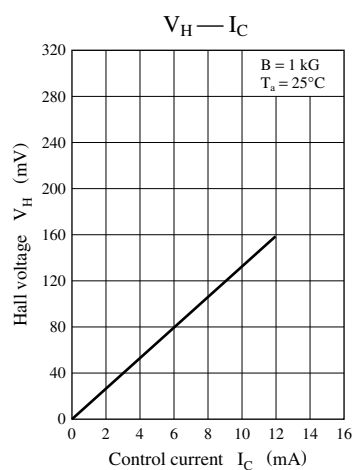
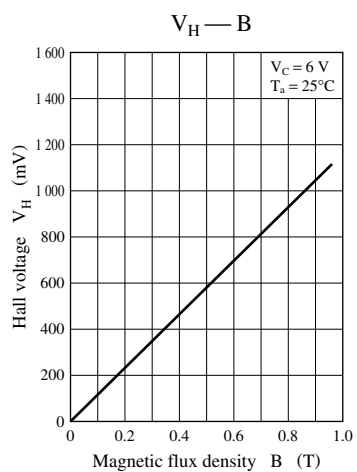
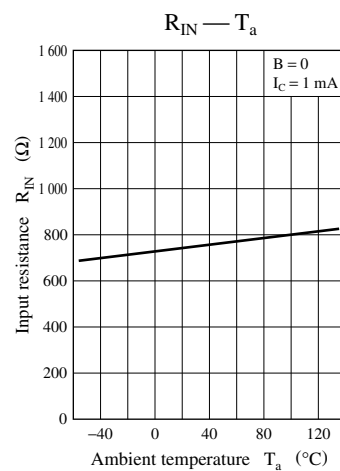
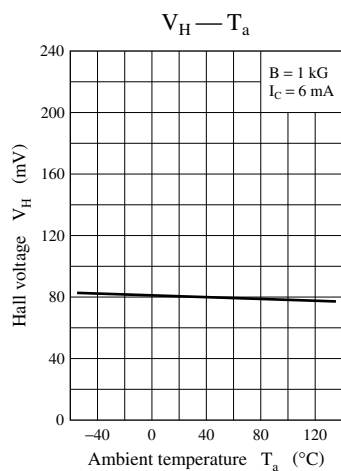
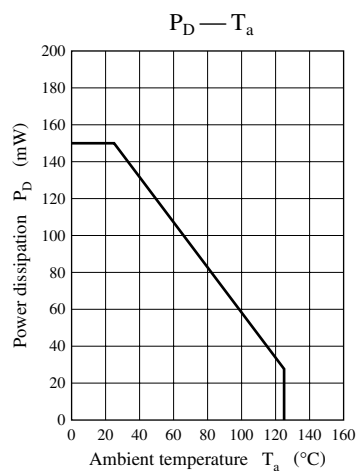
Parameter	Symbol	Rating	Unit
Control voltage	$V_C$	12	V
Power dissipation	$P_D$	150	mW
Operating ambient temperature	$T_{opr}$	-30 to +125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C



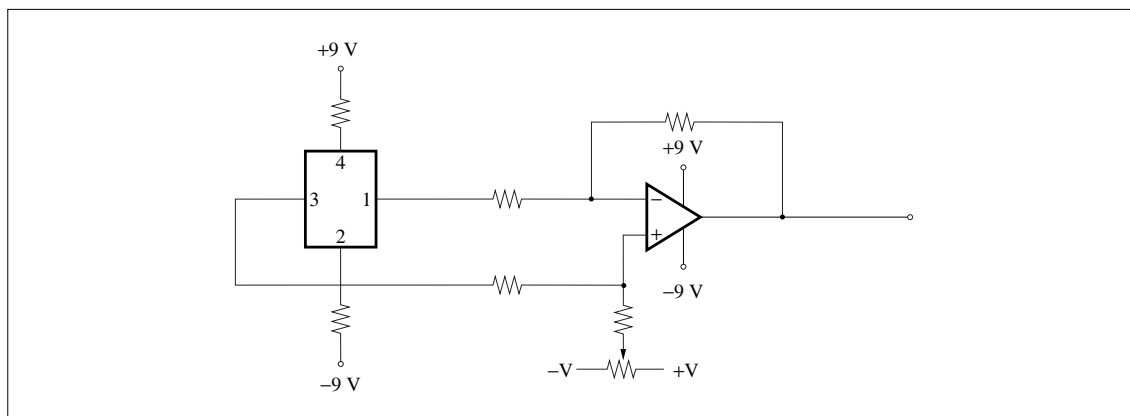
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Hall voltage <sup>*1</sup>	V <sub>H</sub>	V <sub>C</sub> = 6 V, B = 0.1 T	80	105	130	mV
Unequilibrium ratio <sup>*2, 4</sup>	V <sub>HO</sub>	V <sub>C</sub> = 6 V, B = 0 T			±19	mV
Input resistance	R <sub>IN</sub>	I <sub>C</sub> = 1 mA, B = 0 T	0.5	0.75		kΩ
Output resistance	R <sub>OUT</sub>	I <sub>C</sub> = 1 mA, B = 0 T		1.7	5	kΩ
Temperature coefficient of hall voltage	β	I <sub>C</sub> = 6 mA, B = 0.1 T			−0.06	%/°C
Temperature coefficient of input resistance	α	I <sub>C</sub> = 1 mA, B = 0 T			0.3	%/°C
Linearity of hall voltage <sup>*3</sup>	γ	I <sub>C</sub> = 6 mA, B = 0.1 T/0.5 T			2	%

\*4:  $V_{\text{HO}}$  rank classification

Note) The part number parenthesis shows conventional part number.



### ■ Typical Drive Circuit



# Caution for Safety

 **DANGER**

Gallium arsenide material (GaAs) is used in this product.

Therefore, do not burn, destroy, cut, crush, or chemically decompose the product, since gallium arsenide material in powder or vapor form is harmful to human health.

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