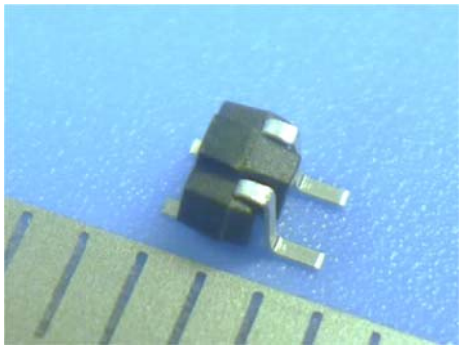
GaAs Type Hall Element

MODEL

NHG529

Vertical sensitive face enables outstanding detection in parallel magnetic-flux to PCB



Features

- Linear output type.
  Hall voltage changes linearly according to the magnetic flux density, and the linearity is excellent.
- Operating temperature range is wide, output variation due to temperature change is small.
- Compact size package.
  Suitable for compact linear position detectors and current sensors.
- Magnetic sensitive surface is mounted vertically against PCB.
  Excellent performance at horizontal flux detection. (* 1)

Applications

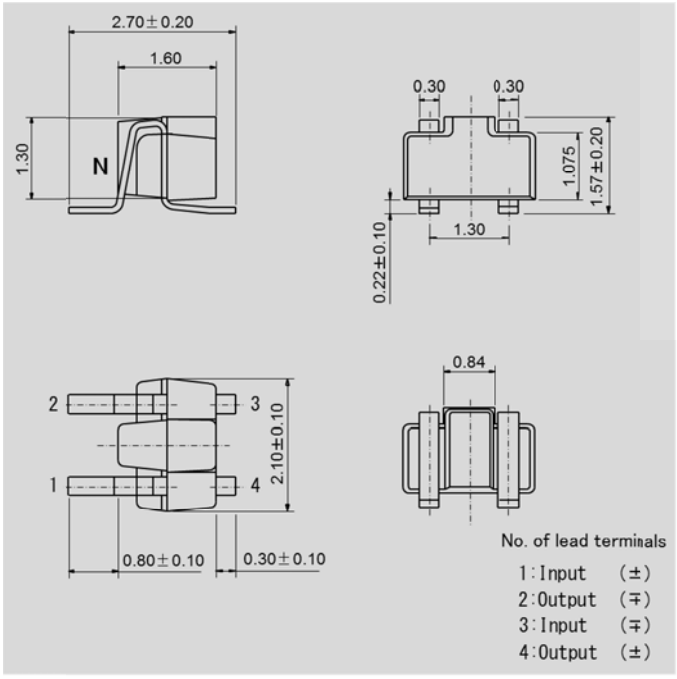
- Current Sensor
- Position Sensors, Rotation Sensors
- Non-contacting Magnetic Sensors
- Brushless Motor
- other Magnetic Flux Sensors

Specifications

◆ Pb-free ◆

Available to supply lead-free products.

◆ Dimensions ◆ (UNIT: mm)



◆ Absolute Maximum Ratings ◆

Item	Symbol	Limit	Unit
Max. Input Current	Icmax	10 (at 25ºC)	mA
Operating Temp. Range	Topr	-40 ~ 125	ºC
Storage Temp. Range	Tstg	-55 ~ 150	ºC

◆ Electrical Characteristics (T=25ºC) ◆

Item	Symbol	Conditions	Min.	Max.	Unit
Output Voltage	VH (*2)	Vc=1V B=100mT	25	33	mV
Offset Voltage	Vo	Vc=1V B=0mT	-2.7	2.7	mV
Input Resistance	Rin	I=1mA B=0mT	400	700	Ω
Output Resistance	Rout	I=1mA B=0mT		2000	Ω
Temp. Coefficient of VH	A	B=100mT Ic=1mA Ta=25 ~ 125ºC		-0.06	%/ºC
Temp. Coefficient of Rin	β	B=0mT Ic=1mA Ta=25 ~ 125ºC		0.3	%/ºC

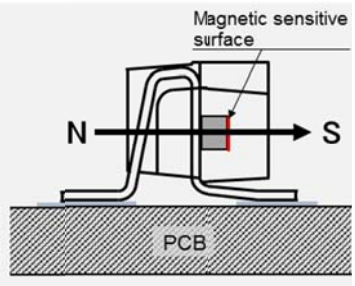
*2 : VH = VHM-Vo (VHM=Hall output voltage measured value)

◆ Packaging ◆

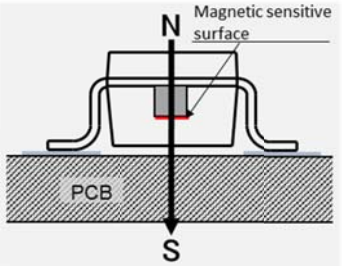
Model	Packaging	Reel/ Bag Max. [pcs]	Carton Max. [pcs]
NHG529	Tape & Reel	2,500	10,000

*1 ◆ Advantage of NHG529 ◆

Not like the other SMD models, NHG529 has a magnetic sensitive surface mounted vertically against PCB by making a special lead process, and has excellent performance at horizontal flux detection.



NHG529



Standard SMD type (Ex. NHG411)

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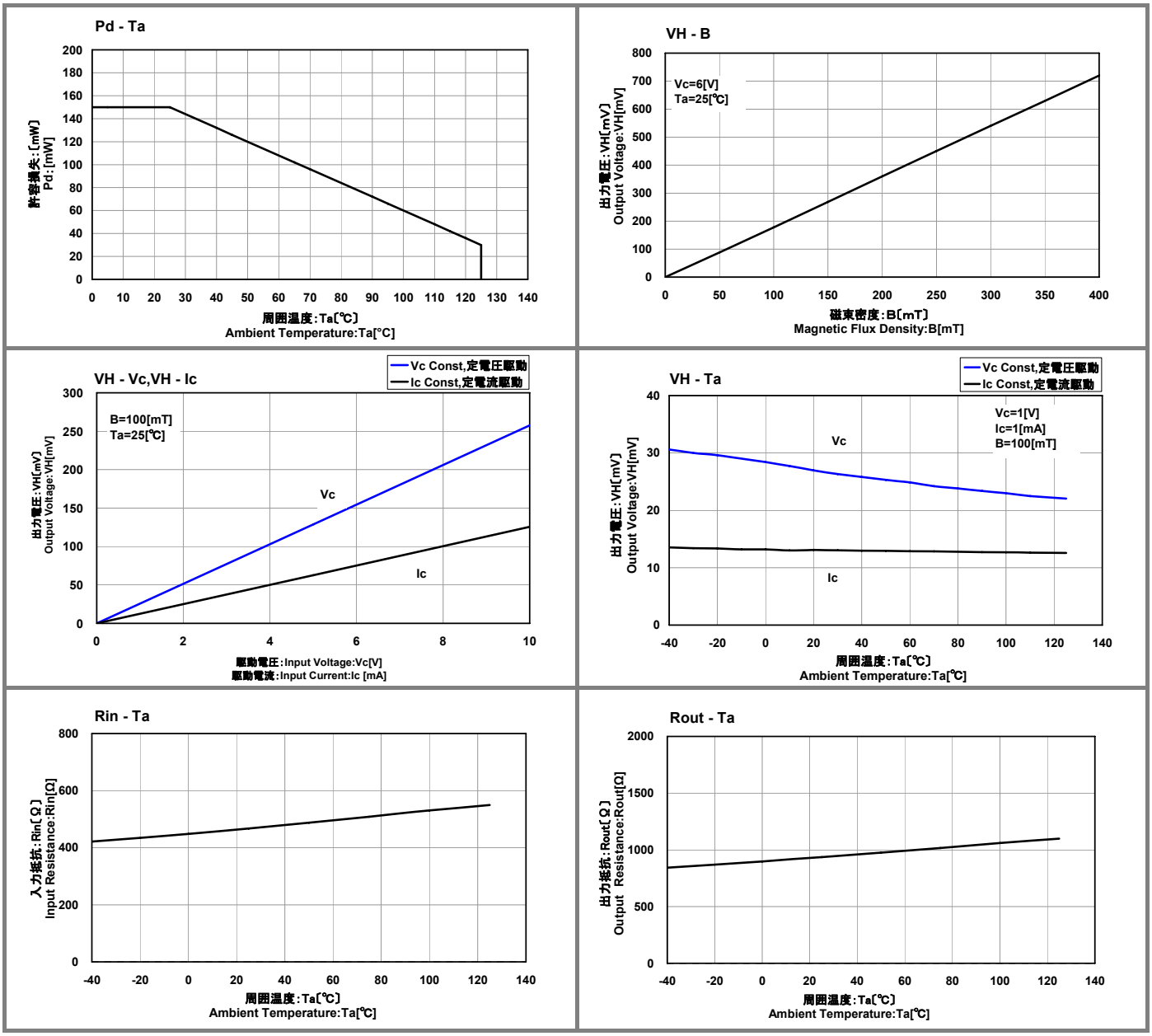
◆ Characteristics Curve ◆



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