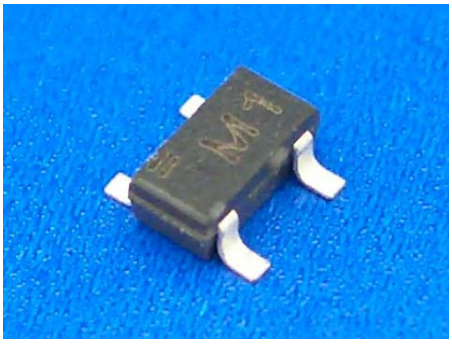
GaAs Type Hall Element

NiCera

MODEL

NHG411



Features

- NHG411 is a linear type hall element using GaAs.
- The hall voltage changes linearly according to the magnetic flux density, and the linearity is excellent.
- Small surface mount package.
- Operating temperature range is wide, output variation due to temperature change is small.

Applications

- Brushless motors
- Current sensors
- Non-contacting magnetic sensors
- Position sensors, rotation sensors
- Other various magnetic sensors.

Specification

◆ Pb-Free product ◆

It corresponds to the Pb-free.

◆ Absolute Maximum Rating ◆

Item	Symbol	Limit	Unit
Max. Input Current	Icmax	10(at25°C)	mA
Operating Temp. Range	Topr	−40～125	°C
Storage Temp. Range	Tstg	−55～150	°C

◆ Electrical Characteristics(T=25°C) ◆

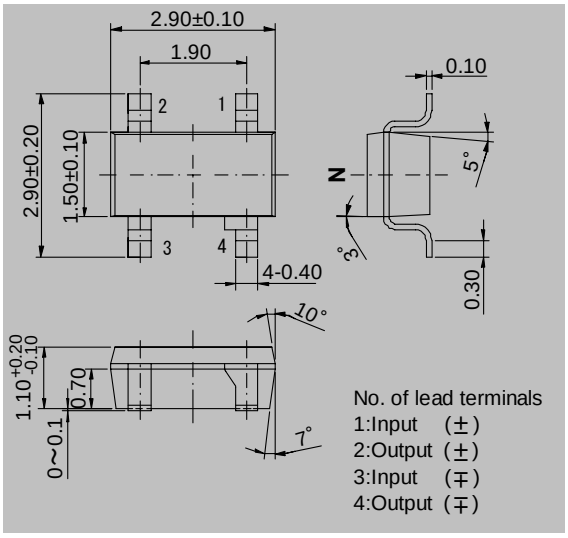
Item	Symbol	Conditions	Min.	Max.	Unit
Output Voltage	VH※1	Vc=1V B=100mT	25	33	mV
Offset Voltage	Vo	Vc=1V B=0mT	−2.7	2.7	mV
Input Resistance	Rin	I=1mA、B=0mT	400	700	Ω
Output Resistance	Rout	I=1mA、B=0mT		2000	Ω
Temp. Coefficient of VH	α	B=100mT Ic=1mA Ta=−40～80°C		−0.06	%/°C
Temp. Coefficient of Rin	β	B=0mT Ic=1mA Ta=−40～80°C		0.3	%/°C

※1 : VH = VHM − Vo (VHM = Hall output voltage measured value)

◆ Packaging ◆

Model	Packaging	Reel Max.(pcs)	Carton Max.(pcs)
NHG411	Taping reel	3,000	15,000

◆ Dimensional Drawing ◆ (UNIT: mm)



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2016.6

◆ Characteristics Curve ◆