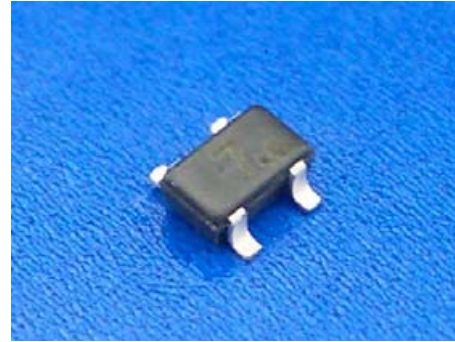


## MODEL

NHE528

NHE528R

(Reverse taping product of NHE528)



### Features

This is a high sensitivity type of Nicera Hall element using evaporated InSb film.

It performs effectively in low magnetic fields due to the high sensitivity.

The input and output resistance values are suitable for transistor circuits.

Due to its compact package, it is suitable for thin motors.

### Applications

Brushless motors

DVD drive, CD-ROM drive, floppy disk drive

Other small precision motors

Non-contacting magnetic sensors

Position sensors, rotation sensors, current sensors

Magnetic flux sensors other than those above

### Specification

Halogen and Pb-free products

Nicera is able to supply halogen and Pb-free products.

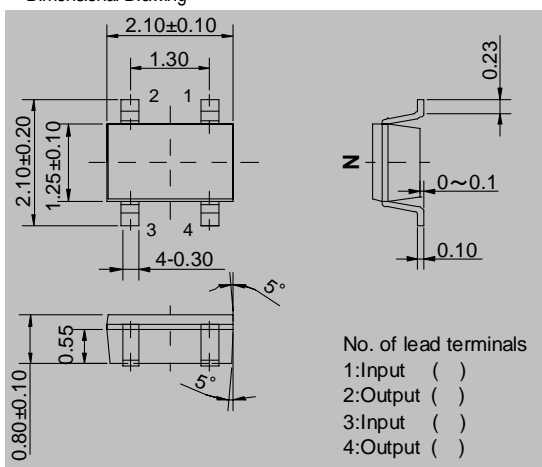
Please let us know your requirement when you make an inquiry.

For these products, "HF" is put at the end of model names as below,

#### NHE528 - HF

Conventional products (Pb-free but not halogen-free) are available, which are supplied on built-to-order basis.

#### Dimensional Drawing



### Absolute Maximum Ratings

Item	Symbol	Limit	Unit
Max. Input Current	I <sub>cm</sub>	20(at25 °C)	mA
Operating Temp. Range	T <sub>opr</sub>	-40 ~ 110	
Storage Temp. Range	T <sub>stg</sub>	-40 ~ 125	

### Electrical Characteristics (T=25 °C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Voltage	V <sub>H</sub>	V <sub>c</sub> =1V B=50mT	168		320	mV
Offset Voltage	V <sub>o</sub>	V <sub>c</sub> =1V B=0mT	-7		7	mV
Input Resistance	R <sub>in</sub>	I=1mA	240		550	
Output Resistance	R <sub>out</sub>	I=1mA	240		550	
Temp. Coefficient of V <sub>H</sub>	<sup>1</sup> HI	Standard 20 Average 0 ~ 40 B=50mT I <sub>c</sub> =5mA		-1.8		%/°C
Temp. Coefficient of R <sub>in</sub>	<sup>2</sup> R	B=0mT I <sub>c</sub> =0.1mA		-1.8		%/°C

$$1: HI = [1/VH(T1)] \times [(VH(T3) - VH(T2)) / (T3 - T2)] \times 100$$

$$2: R = [1/Rin(T1)] \times [(Rin(T3) - Rin(T2)) / (T3 - T2)] \times 100$$

$$T1=20 °C, T2=0 °C, T3=40 °C$$

### Classification of Output Voltage

Model	Rank	V <sub>H</sub> (mV)	Conditions
NHE528	4	168~204	Constant Voltage Drive V <sub>H</sub> =V <sub>H</sub> M-V <sub>o</sub> V <sub>H</sub> M=Measured Hall Voltage (at 50mT) V <sub>o</sub> =Offset Voltage(at 0 mT)
	5	196~236	
	6	228~274	
	7	266~320	

### Packaging

Model	Packaging	Reel Max. (pcs)	Carton Max. (pcs)
NHE528	Taping reel	4,000	120,000
NHE528R	Taping reel	4,000	120,000

◆ Characteristics Curve ◆

