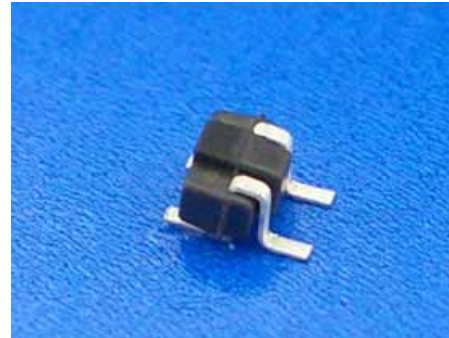


## MODEL

**NHE529T** (Shipped in the taping reel)

**NHE529** (Shipped in bulk)



### 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.

The magnetic sensitive surface is perpendicular to the PCB, thus, it is able to efficiently detect the magnetic flux from the lateral side of the package which is orthogonal to the magnetic sensitive surface.

### 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.

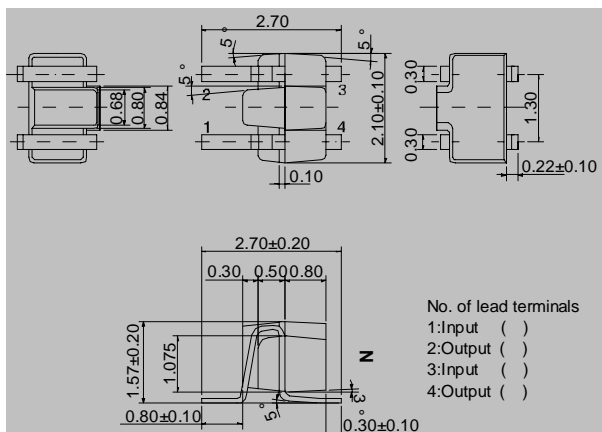
For these products, "HF" is put at the end of model names as below,

**NHE529T - HF**

**NHE529 - 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>cmax</sub>	20(at25 )	mA
Operating Temp. Range	T <sub>opr</sub>	-40 ~ 110	
Storage Temp. Range	T <sub>stg</sub>	-40 ~ 125	

#### Electrical Characteristics (T=25 )

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Voltage	V <sub>H</sub>	V <sub>c</sub> =1V B=50mT	168		428	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		%/
Temp. Coefficient of R <sub>in</sub>	<sup>2</sup> R	B=0mT I <sub>c</sub> =0.1mA		-1.8		%/

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

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

$$T1=20, T2=0, T3=40$$

#### Classification of Output Voltage

Model	Rank	V <sub>H</sub> (mV)	Conditions
NHE529T	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)
NHE529	5	196 ~ 236	
	6	228 ~ 274	
	7	266 ~ 320	
	8	310 ~ 370	
	9*	360 ~ 428	

\* Rank 4&9 need to be discussed individually, according to the production condition. Please contact us for the details.

#### Packaging

Model	Packaging	Reel/ Bag Max. (pcs)	Carton Max. (pcs)
NHE529T	Taping reel	2,500	60,000
NHE529	Bulk (Bag)	1,000	100,000

## Characteristics Curve

