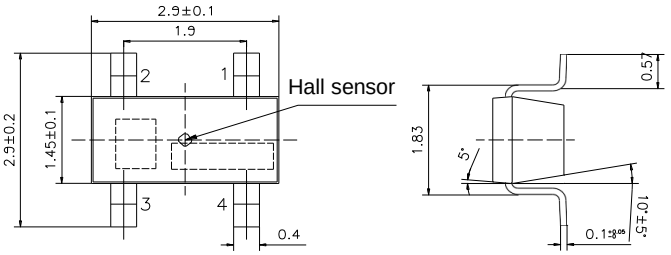
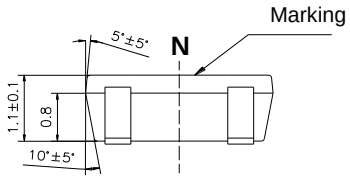
Features

- *Ultra High-sensitivity InSb Hall element*
- *Classic SOT Package*
- *Shipped in packet-tape reel (3,000pcs per reel)*
- *Reverse taping of PIH101 , marking side down*

Dimensional Drawing (Unit: mm)

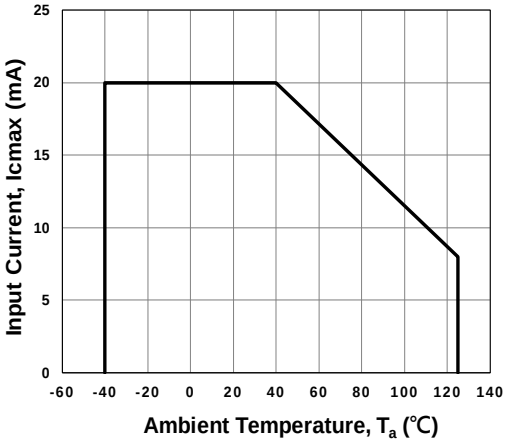




Pin Configuration		
Input	1 (±)	3 (∓)
Output	2 (±)	4 (∓)

Absolute Maximum Rating

Symbol	Parameter	Rating	Units
T_{STG}	Storage Temperature Range	-55 to 150	℃
T_{opr}	Operating Temperature Range	-40 to 125	℃
I_C	Maximum Input Current	20	mA



Input current Detraing

Table 1. Electrical Characteristics （T_a = 25℃）

Item	Symbol	Test Conditions.	Min.	Typ.	Max.	Unit
Hall Voltage	V_H	B = 50mT, V_C=1V	168	---	516	mV
Input Resistance	R_{in}	B = 0mT, I_C = 0.1mA	240	---	550	Ω
Output Resistance	R_{out}	B = 0mT, I_C = 0.1mA	240	---	550	Ω
Offset Voltage	V_{os}	B = 0mT, V_C = 1V	-5	---	+5	mV
Temp. Coeffi. of V_H	αV_H	B = 50mT, I_C =5mA, T_a = 0℃ ~ 40℃	---	-1.8	---	%/℃
Temp. Coeffi. of R_{in}	αR_{in}	B = 0mT, I_C =0.1mA, T_a = 0℃ ~ 40℃	---	-1.8	---	%/℃
Dielectric strength		100V D.C	1.0	---	---	MΩ

Note:

1. $V_H = V_{H-M} - V_{os}$

In which V_{H-M} is the Output Hall Voltage, V_H is the Hall Voltage and V_{OS} is the offset Voltage under the identical electrical stimuli.

2. $\alpha V_H = \frac{1}{V_H(T_1)} \times \frac{V_H(T_3) - V_H(T_2)}{(T_3 - T_2)} \times 100$

3. $\alpha R_{in} = \frac{1}{R_{in}(T_1)} \times \frac{R_{in}(T_3) - R_{in}(T_2)}{(T_3 - T_2)} \times 100$

T_1 = 20℃ , T_2 = 0℃ , T_3 = 40℃

Table 2. Classification of Hall Voltage (V_H)

Rank	V_H [mV]	Conditions
C	168 ~ 204	B=50mT, V_C=1V
D	196 ~ 236	
E	228 ~ 274	
F	266 ~ 320	
G	310 ~ 370	
H	360 ~ 415	
I	405 ~ 465	
J	454 ~ 516	

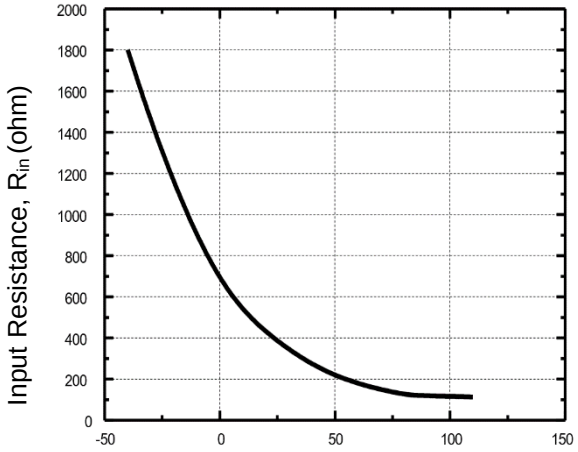


Fig.1 R_{in}-T_a

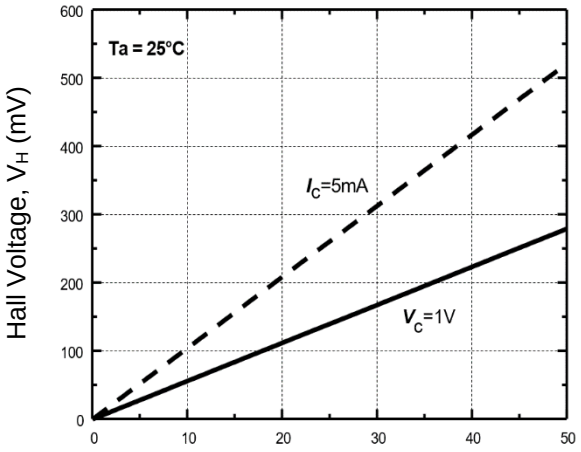


Fig.2 V_H-B

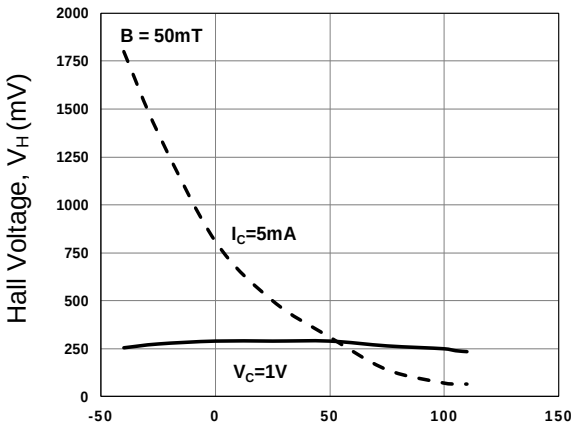


Fig.3 V_H-T_a

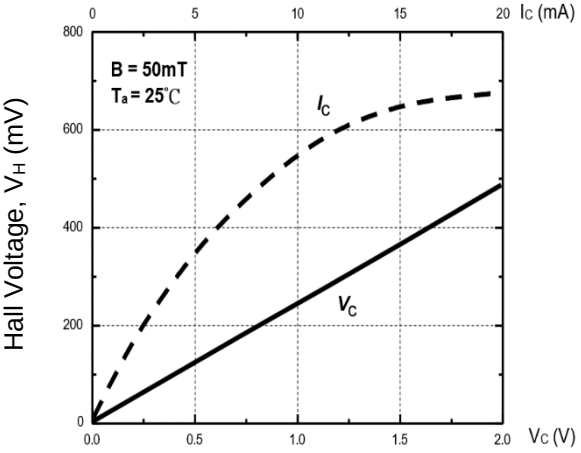


Fig.4 V_H-I_C , V_H-V_C

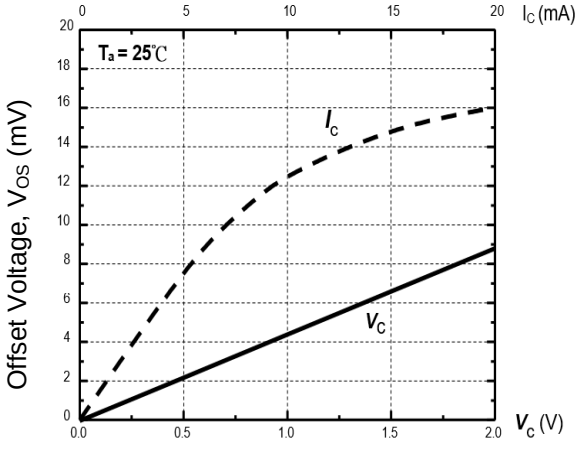


Fig.5 V_{OS}-I_C , V_{OS}-V_C