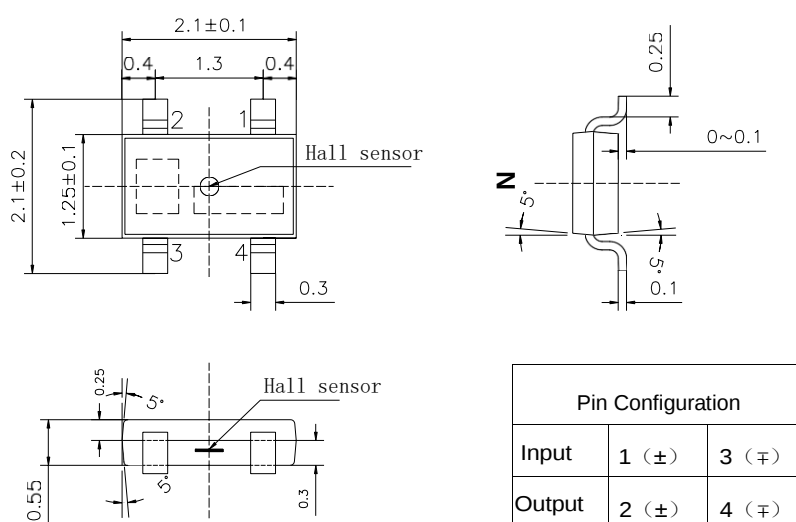


Features

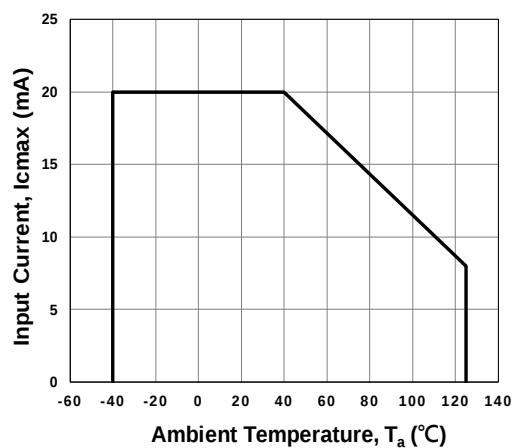
- High-sensitivity InSb Hall element
- Ultra Thin SOT Package
- Shipped in packet-tape reel (4,000pcs per reel)

Dimensional Drawing (Unit: mm)



Absolute Maximum Rating

Symbol	Parameter	Rating	Units
T_{STG}	Storage Temperature Range	-55 to 150	$^{\circ}\text{C}$
T_{opr}	Operating Temperature Range	-40 to 125	$^{\circ}\text{C}$
I_c	Maximum Input Current	20	mA



Input current Detraing

Table 1. Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Test Conditions.	Min.	Typ.	Max.	Unit
Hall Voltage	V_H	$B = 50\text{mT}, V_C=1\text{V}$	168	---	274	mV
Input Resistance	R_{in}	$B = 0\text{mT}, I_C = 0.1\text{mA}$	250	---	550	Ω
Output Resistance	R_{out}	$B = 0\text{mT}, I_C = 0.1\text{mA}$	250	---	550	Ω
Offset Voltage	V_{os}	$B = 0\text{mT}, V_C = 1\text{V}$	-7	---	+7	mV
Temp. Coeffi. of V_H	αV_H	$B = 50\text{mT}, I_C = 5\text{mA},$ $T_a = 0^\circ\text{C} \sim 40^\circ\text{C}$	---	-1.8	---	$\%/^\circ\text{C}$
Temp. Coeffi. of R_{in}	αR_{in}	$B = 0\text{mT}, I_C = 0.1\text{mA},$ $T_a = 0^\circ\text{C} \sim 40^\circ\text{C}$	---	-1.8	---	$\%/^\circ\text{C}$

Note:

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

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.

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

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

$$T_1 = 20^\circ\text{C}, T_2 = 0^\circ\text{C}, T_3 = 40^\circ\text{C}$$

Table 2. Classification of Hall Voltage (V_H)

Rank	V_H [mV]	Conditions
C	168 ~ 204	$B=50\text{mT}, V_C=1\text{V}$
D	196 ~ 236	
E	228 ~ 274	

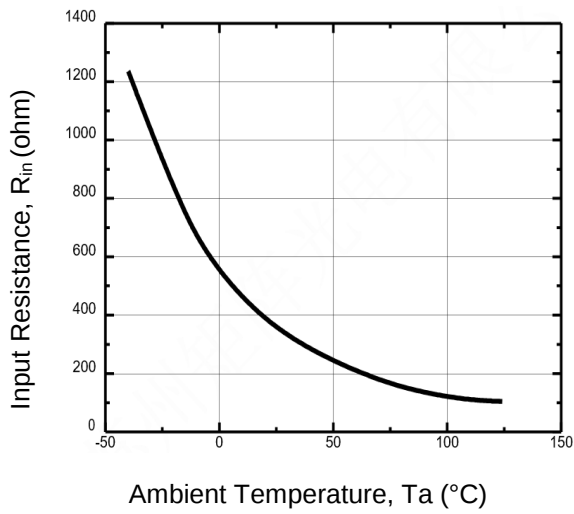


Fig.1 R_{in} - T_a

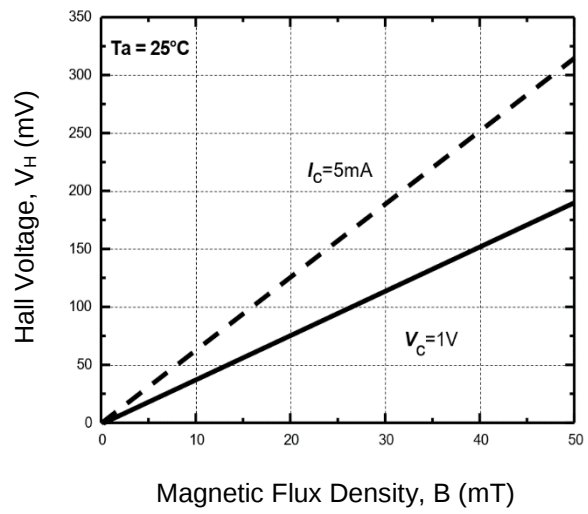


Fig.2 V_H - B

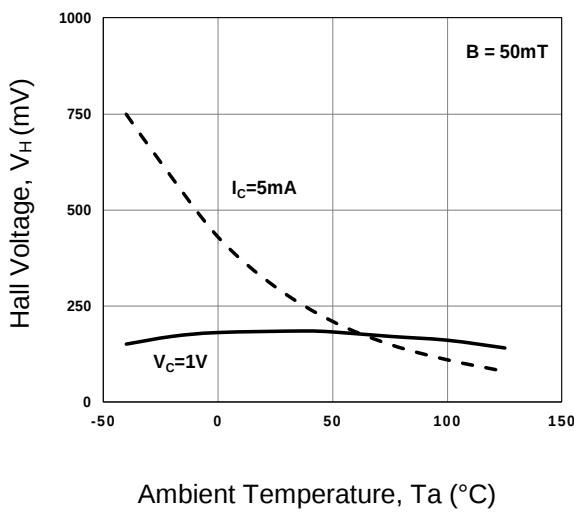


Fig.3 V_H - T_a

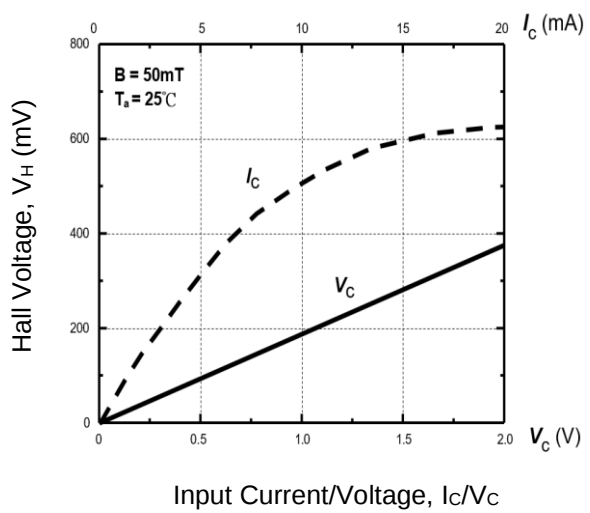


Fig.4 V_H - I_c , V_H - V_c

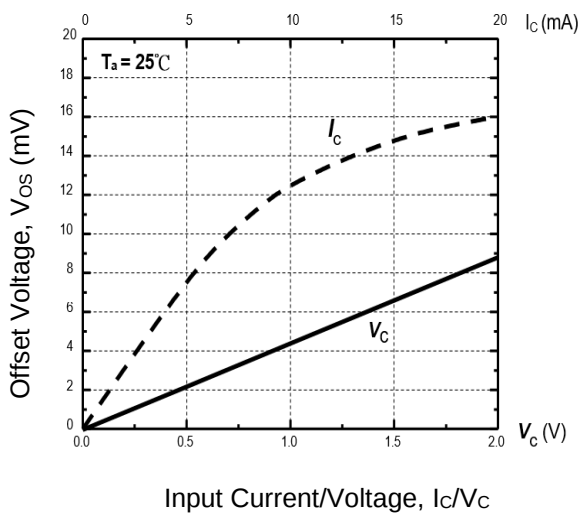


Fig.5 V_{os} - I_c , V_{os} - V_c