HW-322B

Shipped in bulk(500pcs per pack)

Notice : It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

●Absolute Maximum Ratings

Item	Symbol		Limit	Unit
Max. Input Current	I_c	40℃ Const. Current Drive	20	mA
Operating Temp. Range	Topr.		−40 ～ +110	℃
Storage Temp. Range	Tstg.		−40 ～ +125	℃

Note : For constant-voltage drive, stay within this input voltage derating curve envelope.

●Electrical Characteristics(T_a=25℃)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Hall Voltage	V_H ※	Const. Voltage Drive B=50mT, V_c=1V	228		370	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}(Vu)	B=0mT, V_c=1V	−7		+7	mV
Temp. Coefficient of V_H	αV_H ※	Average on 0～40℃ B=50mT, I_c=5mA		−1.8		%/℃
Temp. Coefficient of R_{in}	αR_{in} ※	Average on 0～40℃ B=0mT, I_c=0.1mA		−1.8		%/℃
Dielectric Strength		100V D.C	1.0			MΩ

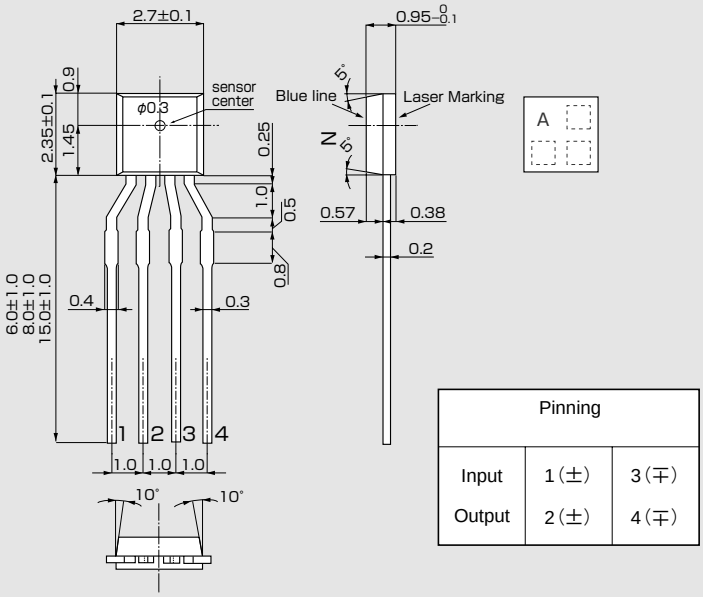
Notes : 1. $V_H = VHM - V_{os}(Vu)$ (VHM:meter indication)

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˚C, T_2 = 0˚C, T_3 = 40˚C

●Dimensional Drawing (Unit : mm)

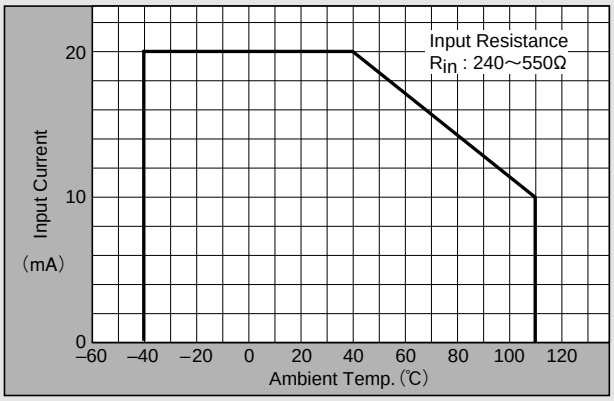


Pinning		
Input	1(±)	3(∓)
Output	2(±)	4(∓)

●Classification of Output Hall Voltage (V_H)

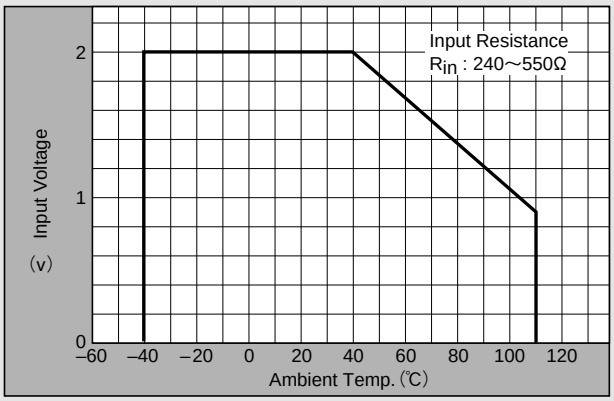
Rank	V_H [mV]	Conditions
E	228 ～ 274	B=50mT, V_c=1V Constant Voltage Drive
F	266 ～ 320	
G	310 ～ 370	

●Input Current Derating Curve 240～550 (Ω)



Note : R_{in} of Hall element decreases rapidly as ambient temperature increases. Ensure compliance with input current derating curve envelope, throughout the operating temperature range.

●Input Voltage Derating Curve 240～550 (Ω)



Note : For constant-voltage drive, stay within this input voltage derating curve envelope.

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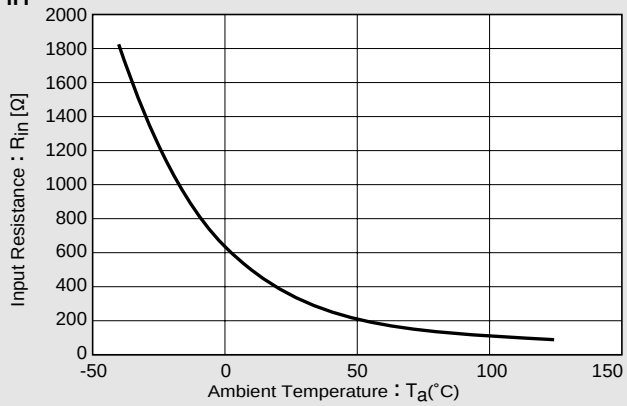
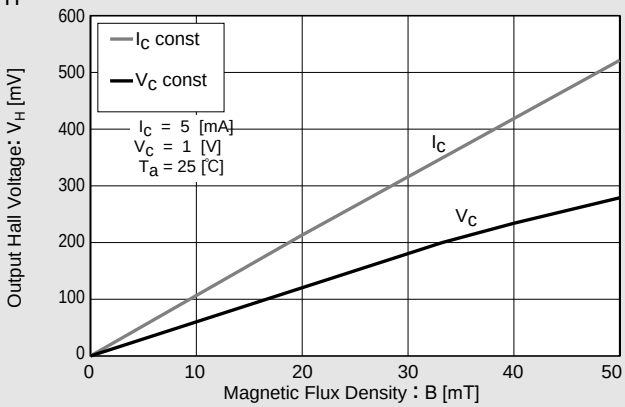
●Characteristic Curves

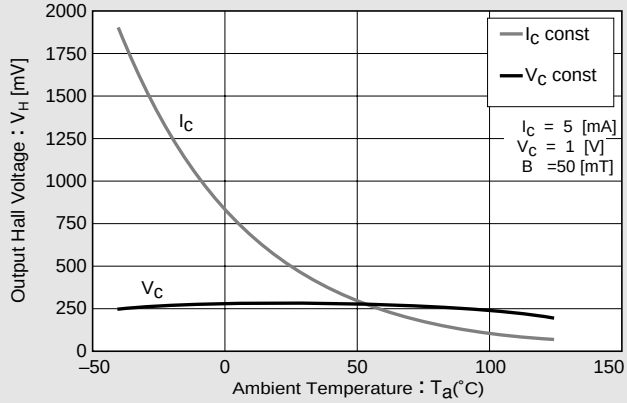
R_{in}-T



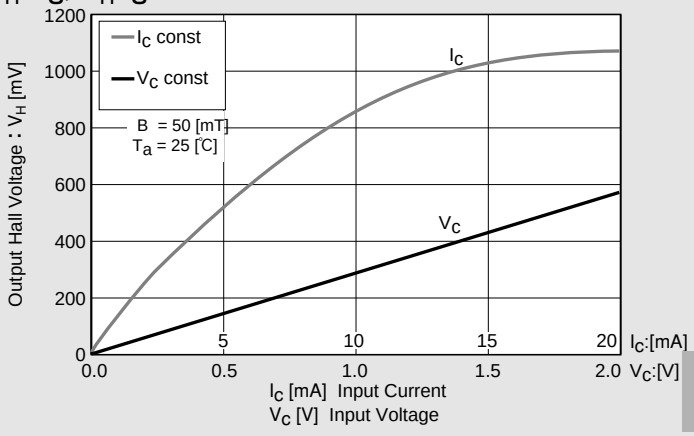
V_H-B



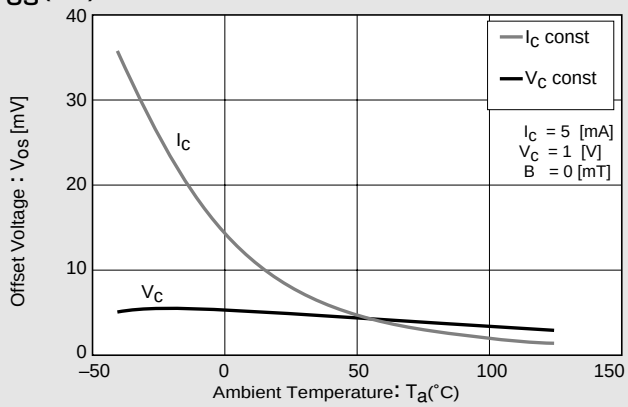
V_H-T



V_H-V_C, V_H-I_C

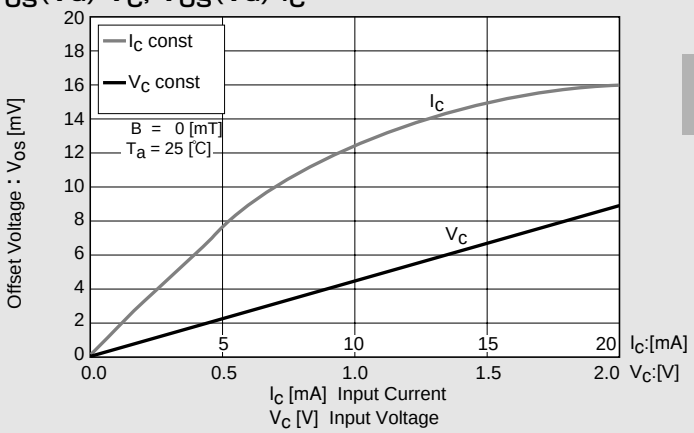


V_{OS}(Vu)-T



※Magnetic Flux Density
1[mT]=10[G]

V_{OS}(Vu)-V_C, V_{OS}(Vu)-I_C



Rin=350〔Ω〕、Vos=4.7〔mV〕 [Vc=1〔V〕]の例
In This Example : Rin=350〔Ω〕, Vos=4.7〔mV〕, [Vc=1〔V〕]

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