

HG-106R

Shipped in packet-tape reel(4,000pcs per reel)

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

●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Max. Input Voltage	V _C	8	V
Max. Input Power	P _D	150	mW
Operating Temp. Range	Topr.	-40 ~ +125	°C
Storage Temp. Range	Tstg.	-40 ~ +150	°C



●Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Hall Voltage	V _H ^{**}	B=50mT, V _C =6V	75		95	mV
Input Resistance	R _{in}	B=0mT, I _C =0.1mA	450		750	Ω
Output Resistance	R _{out}	B=0mT, I _C =0.1mA	1,000		2,000	Ω
Offset Voltage	V _{os} (Vu)	B=0mT, V _C =6V	-16		+16	mV
Temp. Coefficient of V _H	αV _H ^{**}	B=50mT, I _C =5mA Ta=25~125°C			-0.06	%/°C
Temp. Coefficient of R _{in}	αR _{in} ^{**}	B=0mT, I _C =0.1mA Ta=25~125°C			0.3	%/°C
Linearity	ΔK ^{**}	B=0.1/0.5T, I _C =5mA			2	%

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

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

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

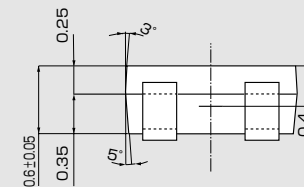
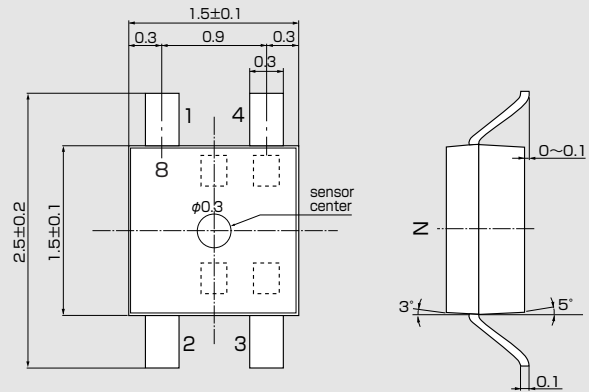
$$4. \Delta K = \frac{K(B_1) - K(B_2)}{[K(B_1) + K(B_2)]/2} \times 100$$

$$T_1 = 25^\circ\text{C}, T_2 = 125^\circ\text{C}$$

$$K = \frac{V_H}{I_C \cdot B}$$

$$B_1 = 0.5T, B_2 = 0.1T$$

●Dimensional Drawing (Unit : mm)



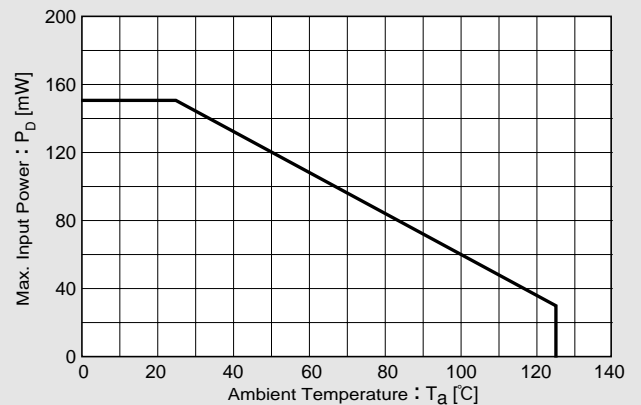
Pinning		
Input	4 (±)	2 (〒)
Output	1 (±)	3 (〒)

●Taping



●Characteristic Curves

Allowable Package Power Dissipation



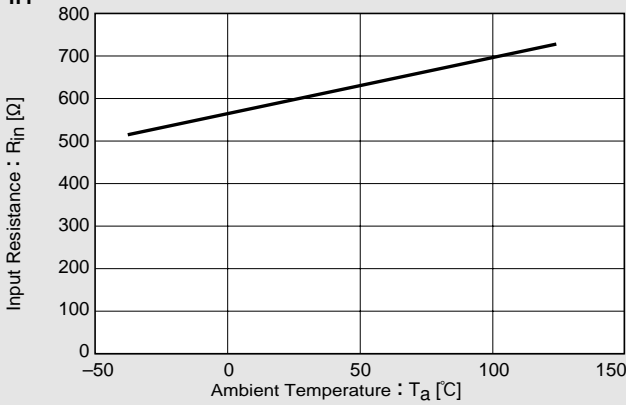
•Please be aware that our products are not intended for use in life support equipment, devices, or systems. Use of our products in such applications requires the advance written approval of our sales staff.
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•Handling precautions required for preventing electrostatic discharge.

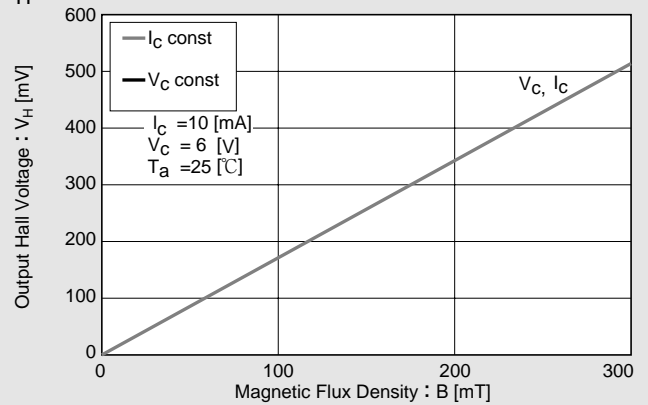
•This product contains gallium arsenide (GaAs) .Handling and discarding precautions required.

●Characteristic Curves

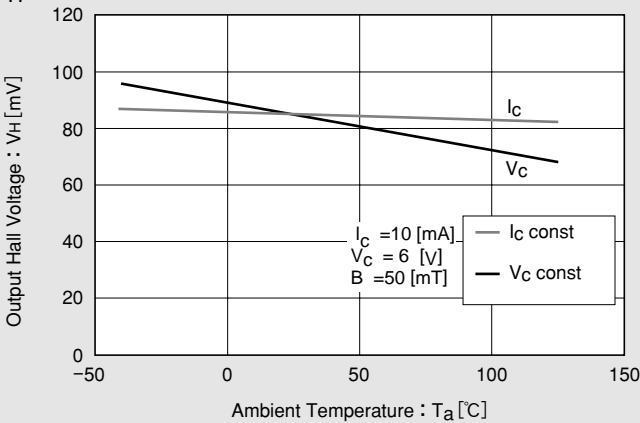
R_{in} -T



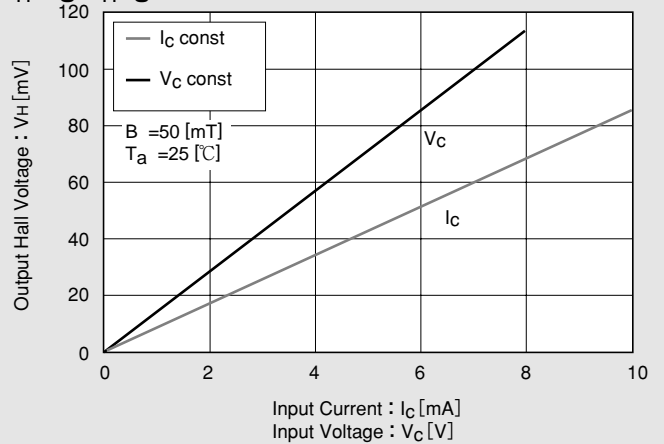
V_H -B



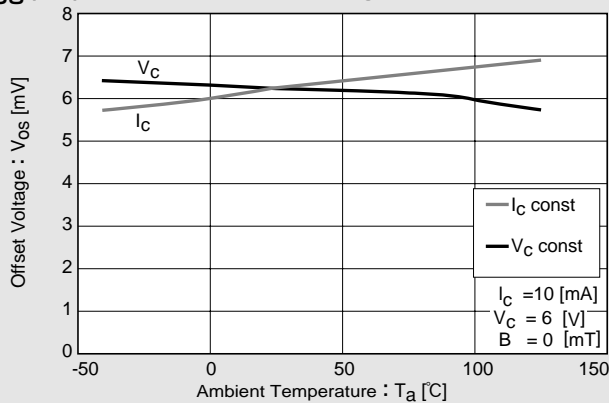
V_H -T



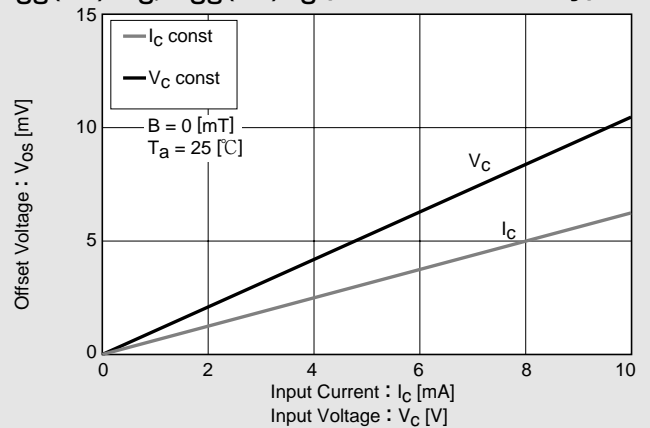
V_H - V_C , V_H - I_C



$V_{OS}(V_u)$ -T (For reference only)



$V_{OS}(V_u)$ - V_C , $V_{OS}(V_u)$ - I_C (For reference only)



※Magnetic Flux Density
 1[mT]=10[G]

In This Example : R_{in} =600 [Ω] , V_{OS} =6.3 [mV] , V_c =6 [V]

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June 2, 2010