

HG-106C

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

Item	Symbol	Limit	Unit
Max. Input Voltage	V_C	10	V
Max.Input Power	P_D	150	mW
Operating Temp. Range	Topr.	-40 ~ +125	°C
Storage Temp. Range	Tstg.	-40 ~ +150	°C

注) 制限抵抗がない場合は、最大入力電圧の範囲以内でご使用下さい。



●Electrical Characteristics($T_a=25^\circ\text{C}$)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Hall Voltage	V_H^*	B=50mT, $V_C=6\text{V}$	55		75	mV
Input Resistance	R_{in}	B=0mT, $I_C=0.1\text{mA}$	650		850	Ω
Output Resistance	R_{out}	B=0mT, $I_C=0.1\text{mA}$	650		850	Ω
Offset Voltage	$V_{os}(V_u)$	B=0mT, $V_C=6\text{V}$	-11		+11	mV
Temp. Coefficient of V_H	αV_H^*	B=50mT, $I_C=5\text{mA}$ $T_a=25\sim 125^\circ\text{C}$			-0.06	%/°C
Temp. Coefficient of R_{in}	αR_{in}^*	B=0mT, $I_C=0.1\text{mA}$ $T_a=25\sim 125^\circ\text{C}$			0.3	%/°C
Linearity	ΔK^*	B=0.1/0.5T, $I_C=5\text{mA}$			2	%

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

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

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

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

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

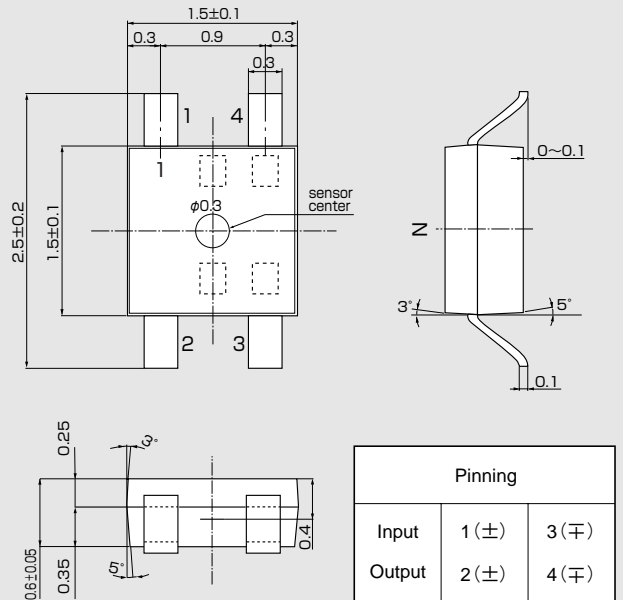
$$K = \frac{V_H}{I_C \cdot B}$$

$$B_1 = 0.5\text{T}, B_2 = 0.1\text{T}$$

●Taping

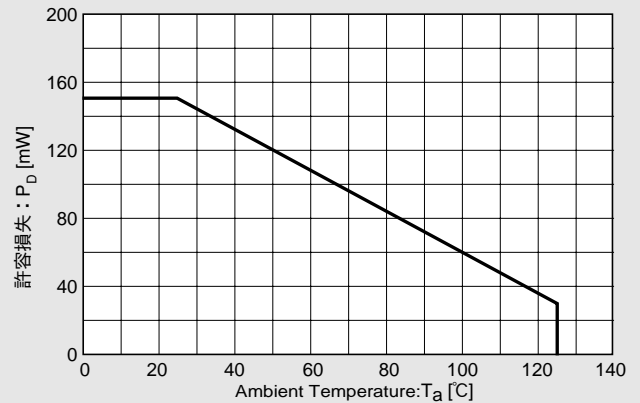


●Dimensional Drawing(Unit : mm)



●Characteristic Curves

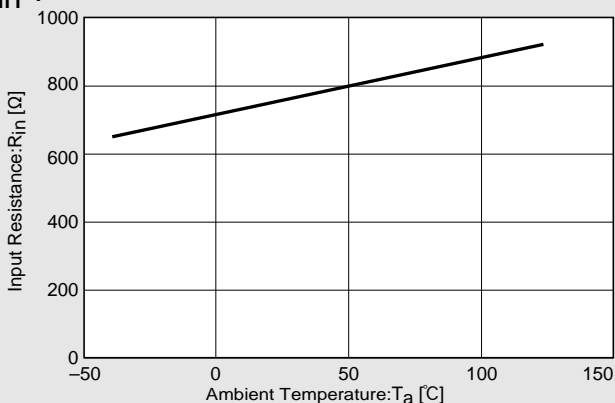
Allowable Package Power Dissipation



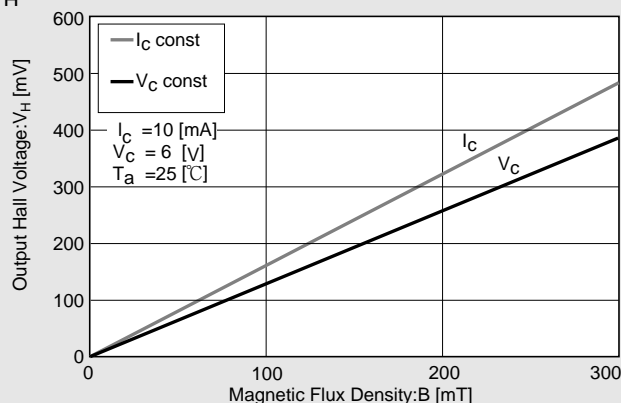
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Certain applications using semiconductor devices may involve potential risks of personal injury, property damage, or loss of life. In order to minimize these risks, adequate design and operating safeguards should be provided by the customer to minimize inherent or procedural hazards. Inclusion of our products in such applications is understood to be fully at the risk of the customer using our devices or systems.
- Handling precautions required for preventing electrostatic discharge.
- This product contains gallium arsenide (GaAs) .Handling and discarding precautions required.

●Characteristic Curves

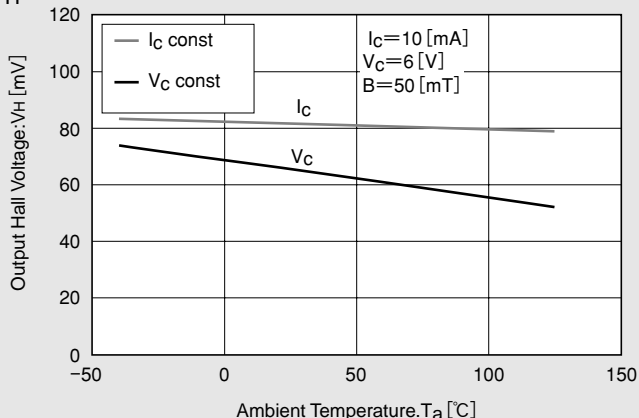
$R_{in}-T$



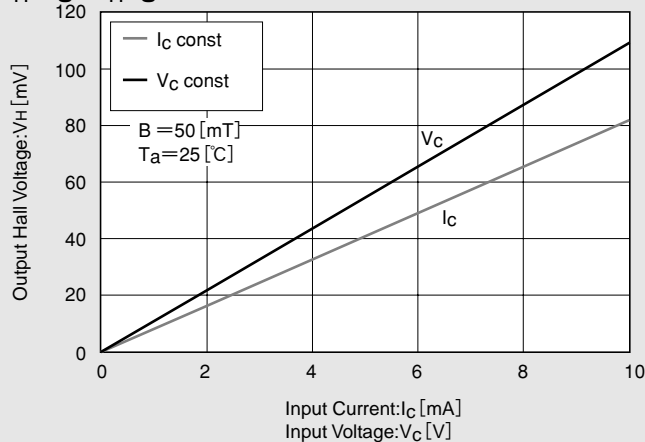
V_H-B



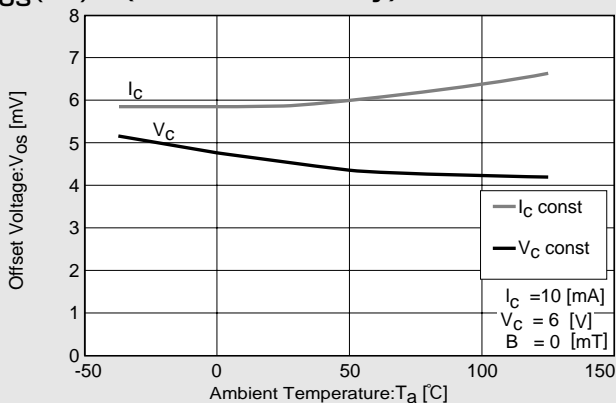
V_H-T



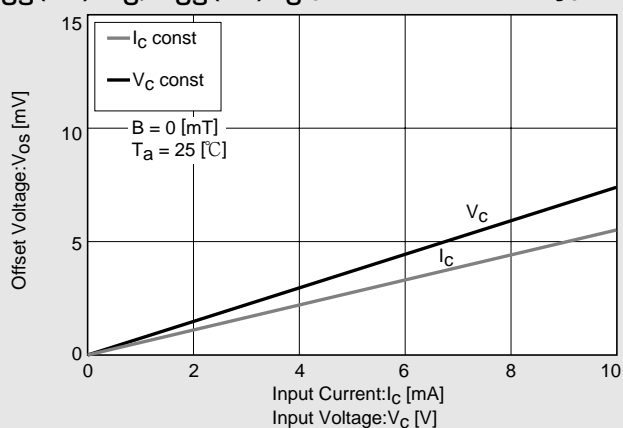
V_H-V_C, V_H-I_C



$V_{OS}(V_u)-T$ (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 : $R_{in}=750$ [Ω], $V_{OS}=4.6$ [mV], [$V_C=6$ (V)]

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