

HG-0813

Shipped in packet-tape reel(5,000pcs 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(T_a=25°C)

Item	Symbol	Limit	Unit
Max. Input Voltage	V _C	12	V
Max.Input Power	P _D	150	mW
Operating Temp. Range	T _{opr.}	-40 ~ +125	°C
Storage Temp. Range	T _{stg.}	-40 ~ +150	°C



●Electrical Characteristics(T_a=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Hall Voltage	V _H **	B=50mT, V _C =6V	78		102	mV
Input Resistance	R _{in}	B=0mT, I _C =0.1mA	1,000	1,250	1,500	Ω
Output Resistance	R _{out}	B=0mT, I _C =0.1mA	1,800	2,500	3,000	Ω
Offset Voltage	V _{os} (V _o)	B=0mT, V _C =6V	-8		8	mV
Temp. Coefficient of V _H	αV _H **	B=50mT, I _C =1mA 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 =1mA			2	%

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

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

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

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

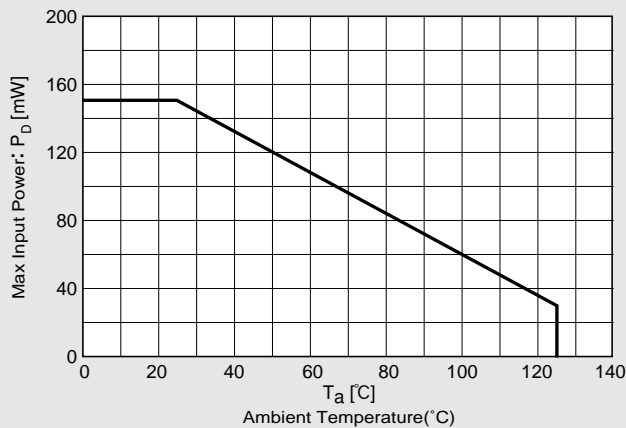
$$T_1 = 25^\circ\text{C}, T_2 = 125^\circ\text{C}$$

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

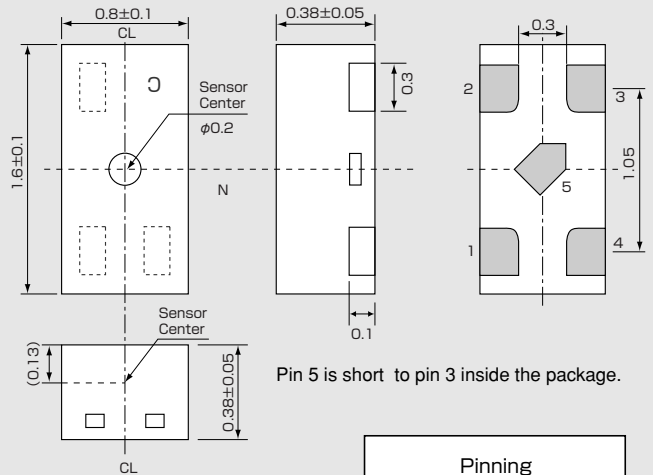
$$B_1 = 0.5\text{T}, B_2 = 0.1\text{T}$$

●Characteristic Curves

Allowable Package Power Dissipation

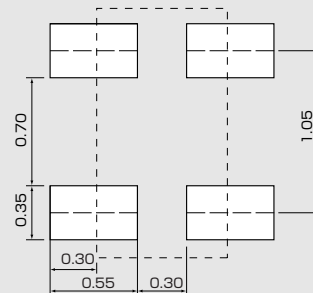


●Dimensional Drawing (Unit : mm)



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

●Land pattern (for reference only) (Unit : mm)



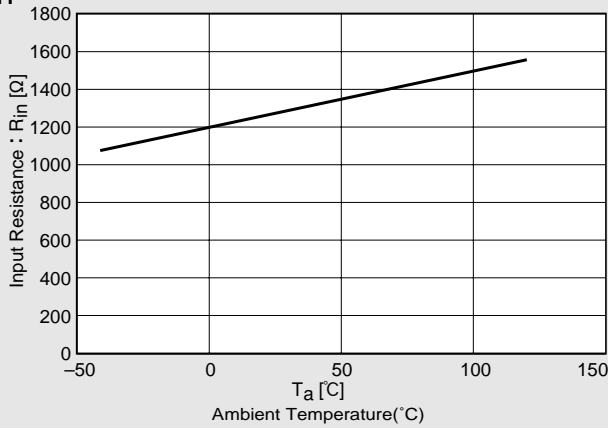
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•Handling precautions required for preventing electrostatic discharge.

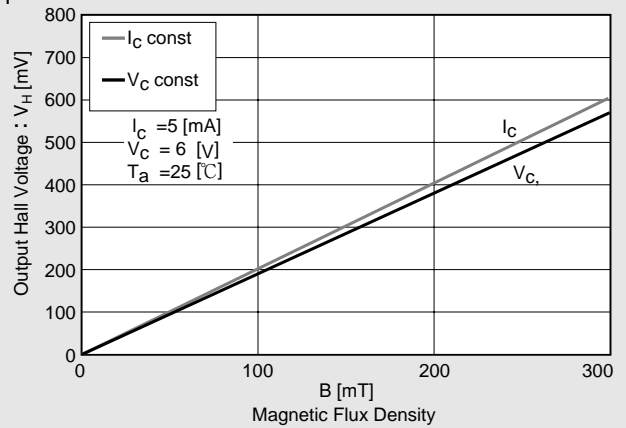
•This product contains gallium arsenide (GaAs) .Handling and discarding precautions required.

●Characteristic Curves

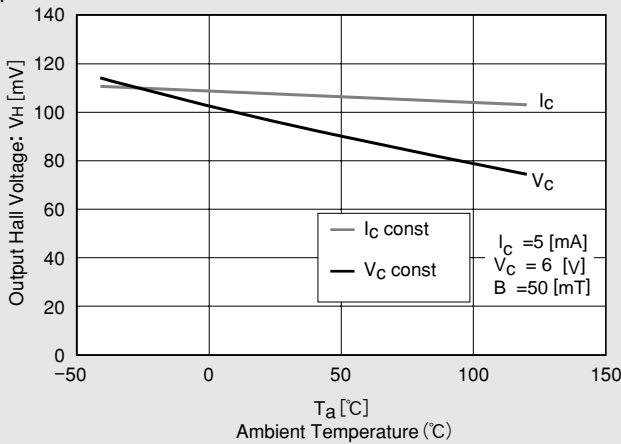
$R_{in}-T$



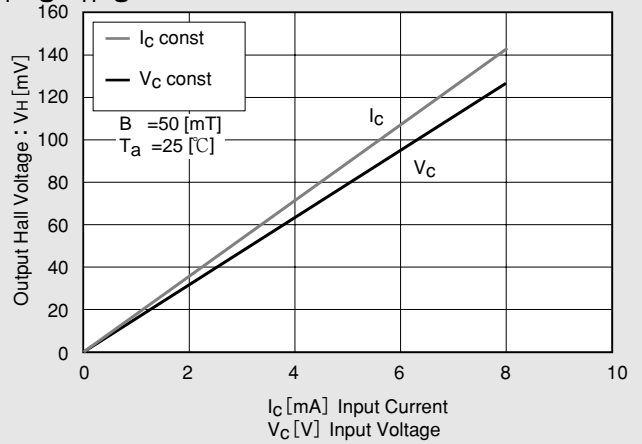
V_H-B



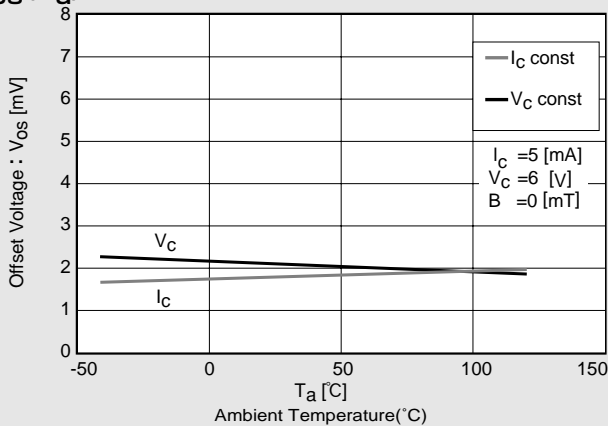
V_H-T



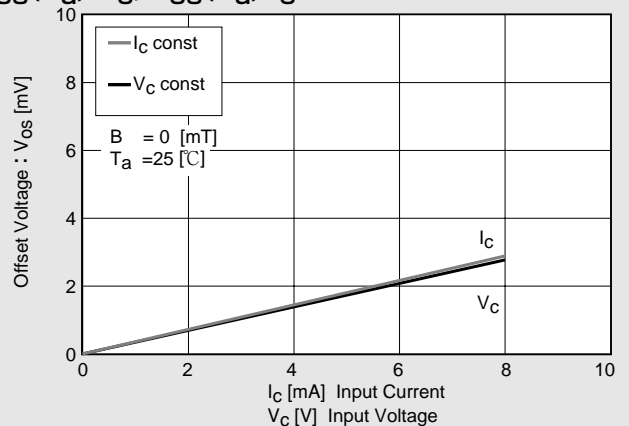
V_H-V_C, V_H-I_C



$V_{OS}(V_U)-T$



$V_{OS}(V_U)-V_C, V_{OS}(V_U)-I_C$



※Magnetic Flux Density
 1[mT]=10[G]

$R_{in}=1270$ [Ω]、 $V_{OS}=2.1$ [mV] [$V_C=6$ [V]]
 In This Example : $R_{in}=1270$ [Ω] , $V_{OS}=2.1$ [mV] , [$V_C=6$ [V]]

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June 2, 2010