HG-0111

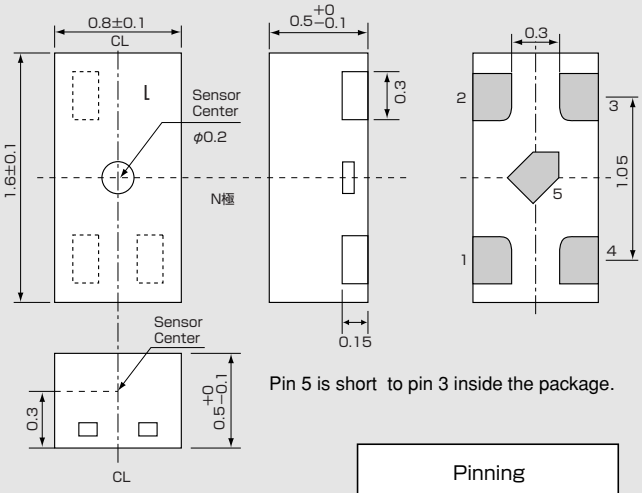
Shipped in packet-tape reel(5,000pcs per reel)

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

●Absolute Maximum Ratings

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

●Dimensional Drawing(Unit : mm)



Pin 5 is short to pin 3 inside the package.

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

●Electrical Characteristics(T_a=25℃)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Hall Voltage	V_H ※	B=50mT, V_C=6V	55		75	mV
Input Resistance	R_{in}	B=0mT, I_C=0.1mA	650		850	Ω
Output Resistance	R_{out}	B=0mT, I_C=0.1mA	650		850	Ω
Offset Voltage	$V_{OS}(V_U)$	B=0mT, V_C=6V	−11		+11	mV
Temp. Coefficient of V_H	αV_H ※	B=50mT, I_C=5mA Ta=25～125℃			-0.06	%/℃
Temp. Coefficient of R_{in}	αR_{in} ※	B=0mT, I_C=0.1mA Ta=25～125℃			0.3	%/℃
Linearity	ΔK ※	B=0.1/0.5T, I_C=5mA			2	%

Notes : 1. $V_H = VHM - V_{os}(V_u)$ (VHM: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. $\alpha R_{in} = \frac{1}{R_{in}(T_1)} \times \frac{R_{in}(T_2) - R_{in}(T_1)}{(T_2 - T_1)} \times 100$

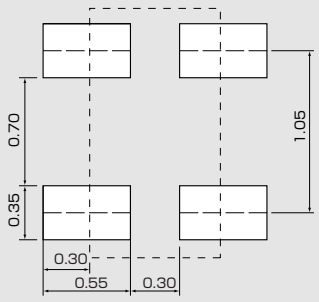
4. $\Delta K = \frac{K(B_1) - K(B_2)}{[K(B_1) + K(B_2)] / 2} \times 100$

$T_1 = 25^\circ C$, $T_2 = 125^\circ C$

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

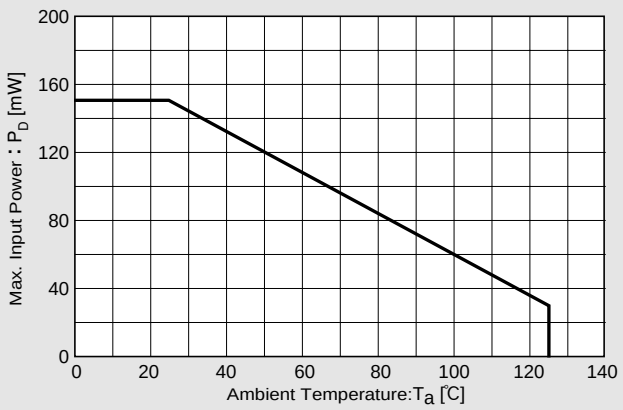
$B_1 = 0.5T$, $B_2 = 0.1T$

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



●Characteristic Curves

Allowable Package Power Dissipation



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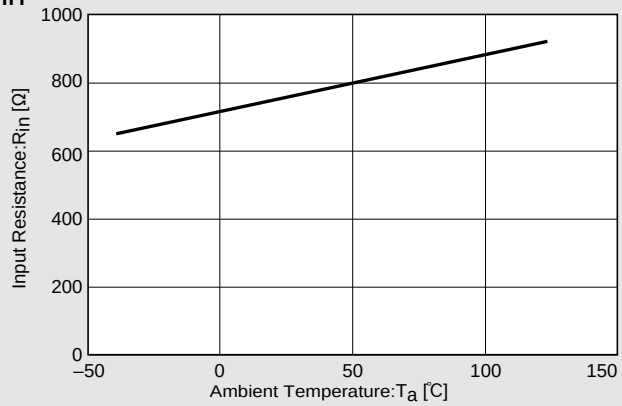
•Handling precautions required for preventing electrostatic discharge.

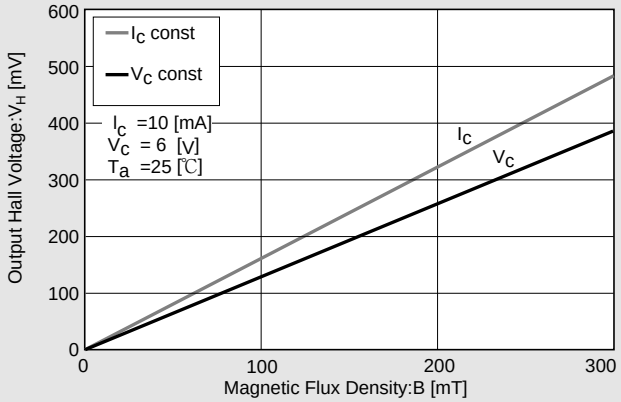
•This product contains galium arsenide（GaAs）.Handling and discarding precautions required.

●Characteristic Curves

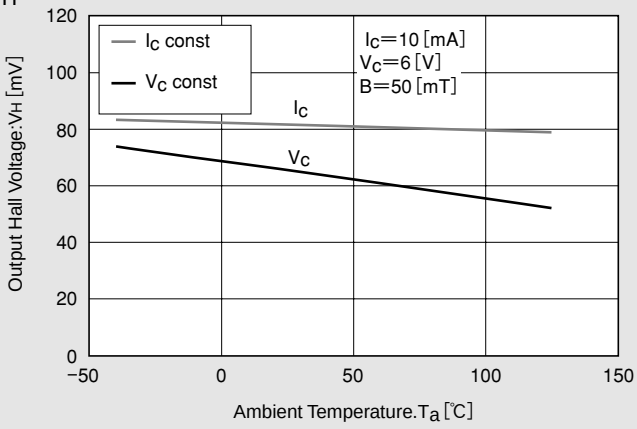
R_{in}-T



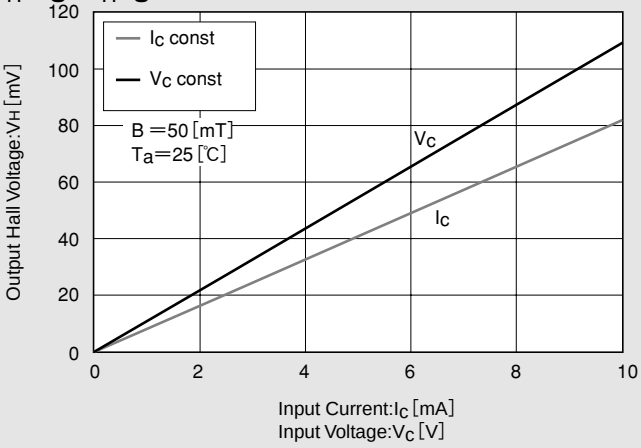
V_H-B



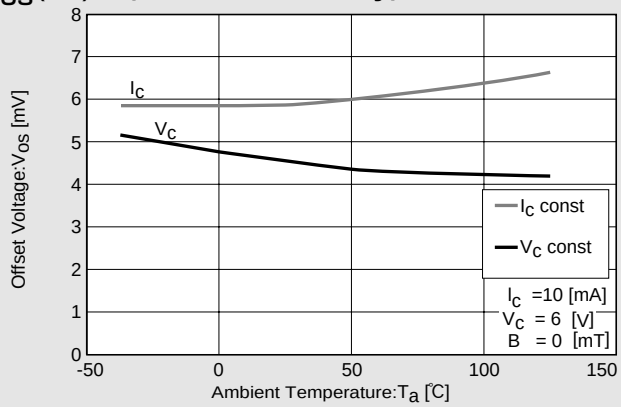
V_H-T



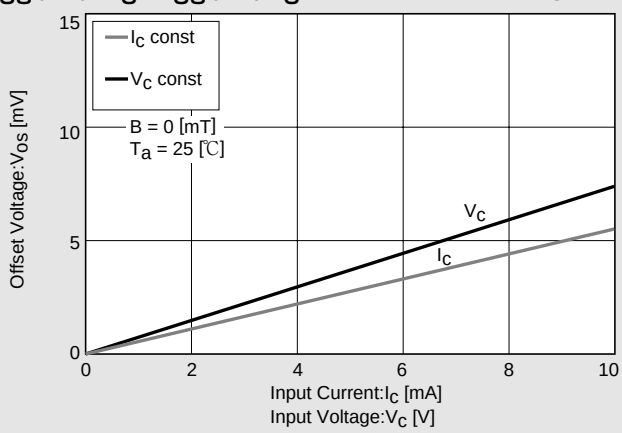
V_H-V_C, V_H-I_C



V_{OS}(Vu)-T (For reference only)



V_{OS}(Vu)-V_C, V_{OS}(Vu)-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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June 2, 2010