

HQ-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	6	V
Max.Input Current	I_C	8	mA
Operating Temp. Range	Topr.	-40 ~ +125	°C
Storage Temp. Range	Tstg.	-40 ~ +150	°C

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

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Hall Voltage	V_H	$B=50\text{mT}, V_C=3\text{V}$	90		130	mV
Input Resistance	R_{in}	$B=0\text{mT}, I_C=0.1\text{mA}$	750		1150	Ω
Output Resistance	R_{out}	$B=0\text{mT}, I_C=0.1\text{mA}$	750		1150	Ω
Offset Voltage	$V_{os}(V_U)$	$B=0\text{mT}, V_C=3\text{V}$	-6		+6	mV
Temp. Coefficient of V_H	αV_H	$B=50\text{mT}, V_C=3\text{V}$ $T_a=25\sim 125^\circ\text{C}$		-0.2		%/°C
Temp. Coefficient of R_{in}	αR_{in}	$B=0\text{mT}, I_C=0.1\text{mA}$ $T_a=25\sim 125^\circ\text{C}$		-0.2		%/°C

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

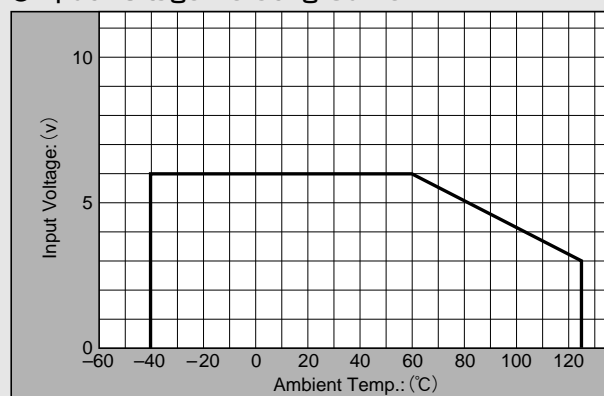
$$2. \alpha V_H = \frac{1}{V_H(T_1)} \times \frac{V_H(T_2) - V_H(T_1)}{(T_2 - T_1)} \times 100$$

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

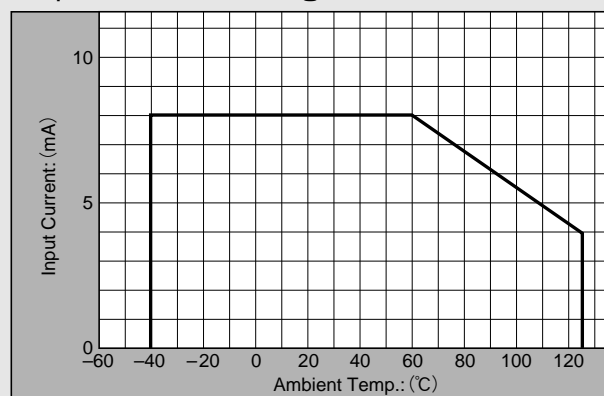
$$T_1 = 25^\circ\text{C}, T_2 = 125^\circ\text{C}$$



●Input Voltage Derating Curve



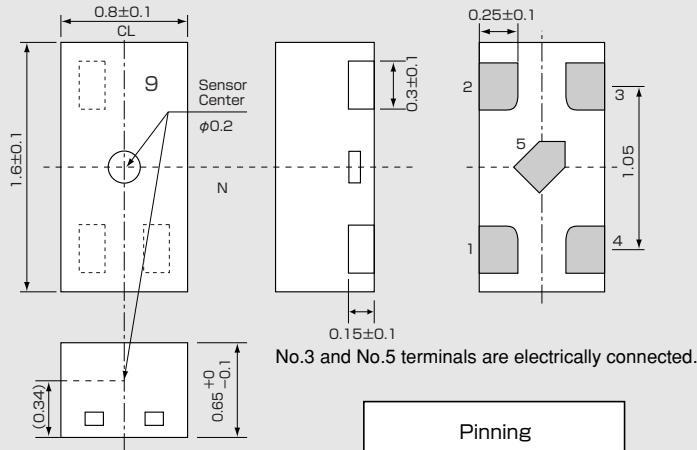
●Input Current Derating Curve



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- Handling precautions required for preventing electrostatic discharge.
- This product contains gallium arsenide (GaAs) .Handling and discarding precautions required.

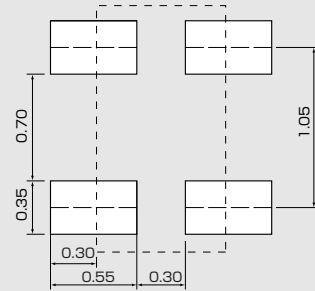
●Dimensional Drawing(Unit : mm)



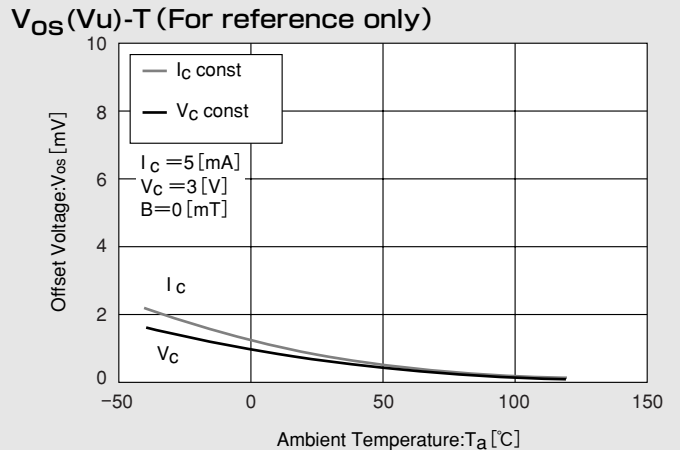
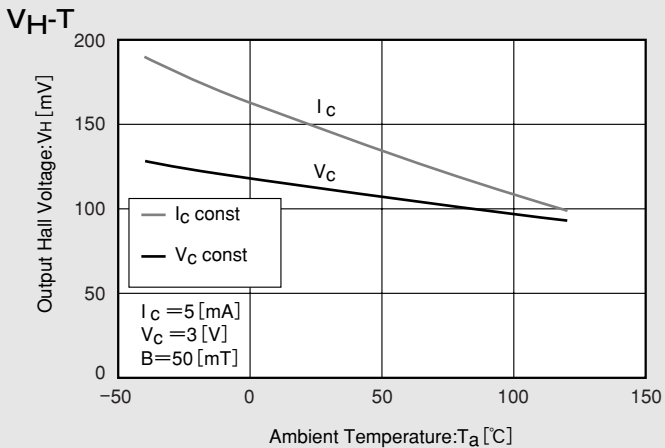
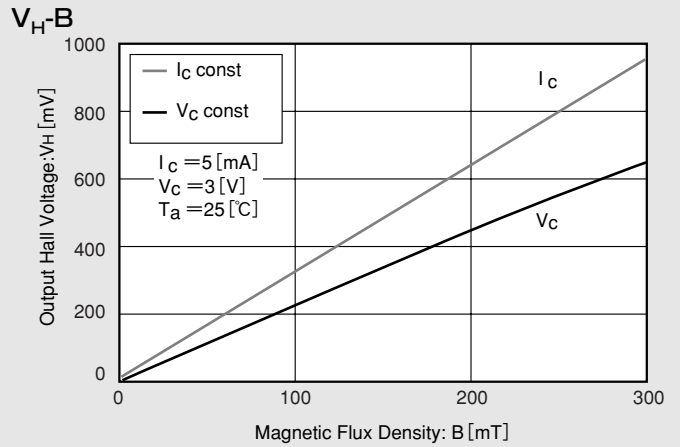
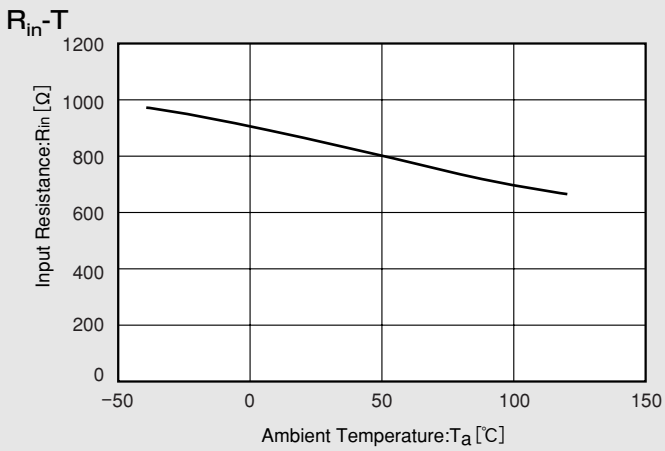
No.3 and No.5 terminals are electrically connected.

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

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



●Characteristic Curves



※Magnetic Flux Density
 1 [mT]=10 [G]

in This Example: Rin=850 [Ω]、Vos=0.8 [mV] [Vc=3 [V]]

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June 2, 2010