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# HG-106A

標準はテーピングリール供給です。(4,000pcs./Reel)

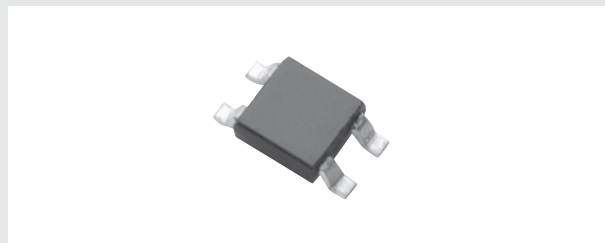
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Shipped in packet-tape reel(4,000pcs per reel)

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## ●最大定格 Absolute Maximum Ratings

| 項目<br>Item                    | 記号<br>Symbol     | 条件<br>Conditions | 定格<br>Limit | 単位<br>Unit |
|-------------------------------|------------------|------------------|-------------|------------|
| 最大制御電圧<br>Max. Input Voltage  | V <sub>C</sub>   | Ta=25°C          | 8           | V          |
| 最大許容損失<br>Max. Input Power    | P <sub>D</sub>   |                  | 150         | mW         |
| 動作温度<br>Operating Temp. Range | T <sub>opr</sub> |                  | -40 ~ +125  | °C         |
| 保存温度<br>Storage Temp. Range   | T <sub>stg</sub> |                  | -40 ~ +150  | °C         |



## ●電気的特性(測定温度 25°C) Electrical Characteristics(Ta=25°C)

| 項目<br>Item  | 記号<br>Symbol                      | 測定条件<br>Conditions                          | 最小<br>Min. | 標準<br>Typ. | 最大<br>Max. | 単位<br>Unit |
|---|-----------------------------------|---|------------|------------|------------|------------|
| ホール出力電圧<br>Output Hall Voltage                    | V <sub>H</sub> *                  | B=50mT, V <sub>C</sub> =6V                  | 75         |            | 95         | mV         |
| 入力抵抗<br>Input Resistance                          | R <sub>in</sub>                   | B=0mT, I <sub>C</sub> =0.1mA                | 450        |            | 750        | Ω          |
| 出力抵抗<br>Output Resistance                         | R <sub>out</sub>                  | B=0mT, I <sub>C</sub> =0.1mA                | 1,000      |            | 2,000      | Ω          |
| 不平衡電圧<br>Offset Voltage                           | V <sub>OS</sub> (V <sub>U</sub> ) | B=0mT, V <sub>C</sub> =6V                   | -16        |            | +16        | mV         |
| 出力電圧の温度係数<br>Temp. Coefficient of V <sub>H</sub>  | αV <sub>H</sub> *                 | B=50mT, I <sub>C</sub> =5mA<br>Ta=25~125°C  |            |            | -0.06      | %/°C       |
| 入力抵抗の温度係数<br>Temp. Coefficient of R <sub>in</sub> | αR <sub>in</sub> *                | B=0mT, I <sub>C</sub> =0.1mA<br>Ta=25~125°C |            |            | 0.3        | %/°C       |
| ホール電圧直線性<br>Linearity                             | ΔK*                               | B=0.1/0.5T, I <sub>C</sub> =5mA             |            |            | 2          | %          |

Notes : 1. V<sub>H</sub> = V<sub>H</sub>M - V<sub>OS</sub> (V<sub>U</sub>) (V<sub>H</sub>M: meter indication)

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

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

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

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

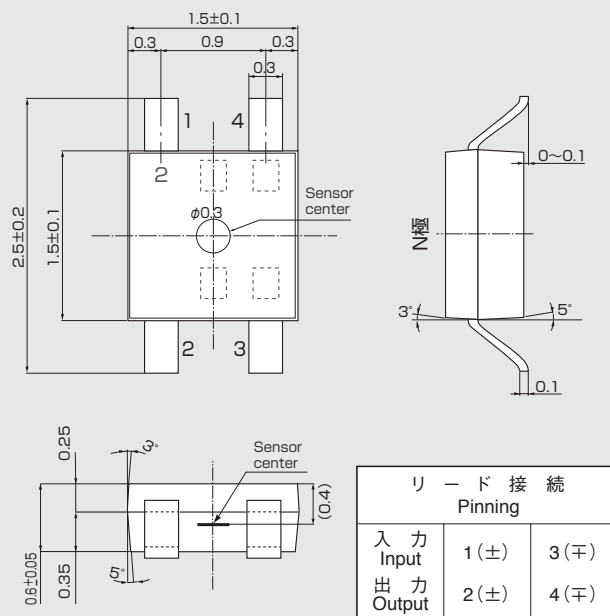
$$K = \frac{V_H}{I_C \cdot B}$$

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

## ●テーピング Taping



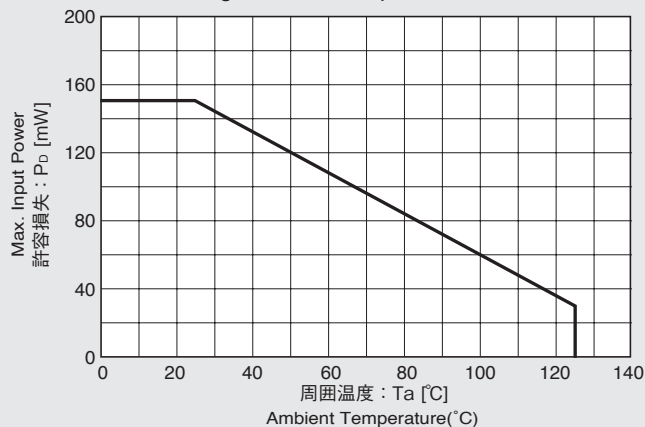
## ●外形寸法図 Dimensional Drawing (Unit : mm)



## ●特性曲線図 Characteristic Curves

許容損失(P<sub>D</sub>)—周囲温度(T<sub>a</sub>)

Allowable Package Power Dissipation



・医療機器、安全装置、航空宇宙用機器、原子力制御用機器など、その装置・機器の故障や動作不良が、直接または間接を問わず、生命、身体、財産等へ重大な損害を及ぼすことが通常予想されるような極めて高い信頼性を要求される用途に弊社製品を使用される場合は、必ず事前に弊社代表取締役の書面による同意をお取りください。

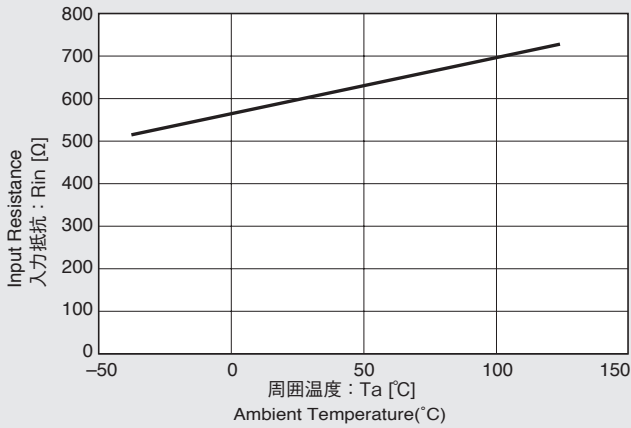
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 ・Handling precautions required for preventing electrostatic discharge.

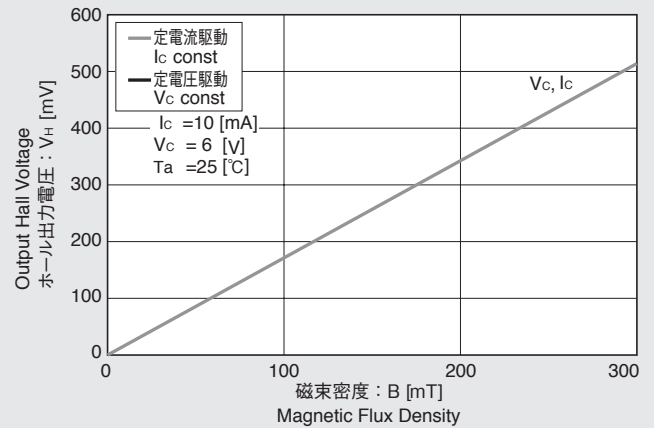
・当製品にはガリウムヒ素 (GaAs) が使用されています。取り扱い及び廃棄に注意してください。  
 ・This product contains gallium arsenide (GaAs). Handling and discarding precautions required.

●特性曲線図 Characteristic Curves

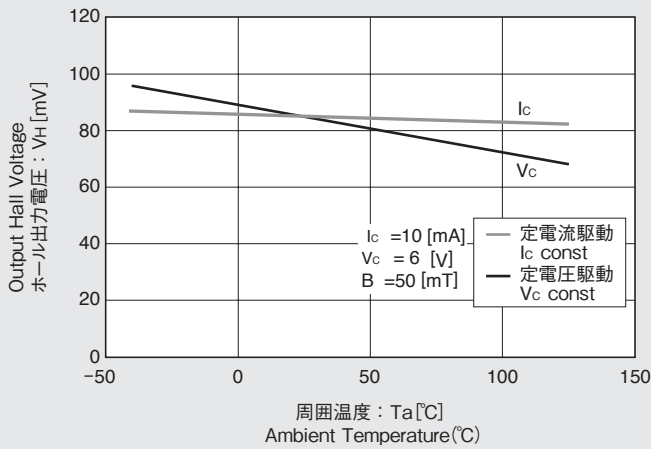
R<sub>in</sub>-T



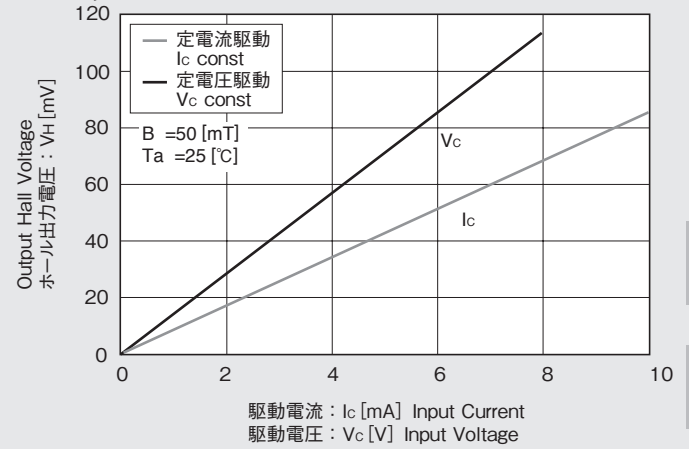
V<sub>H</sub>-B



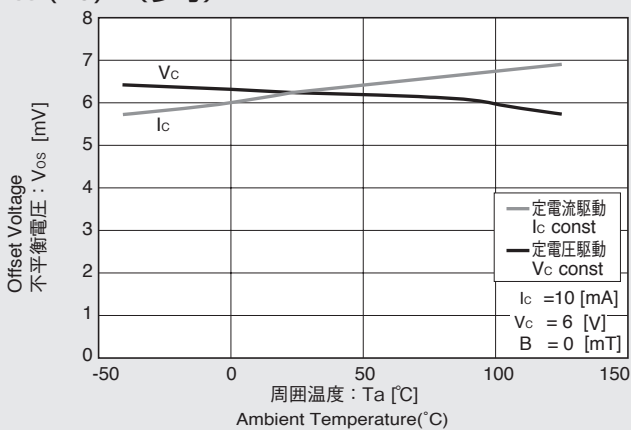
V<sub>H</sub>-T



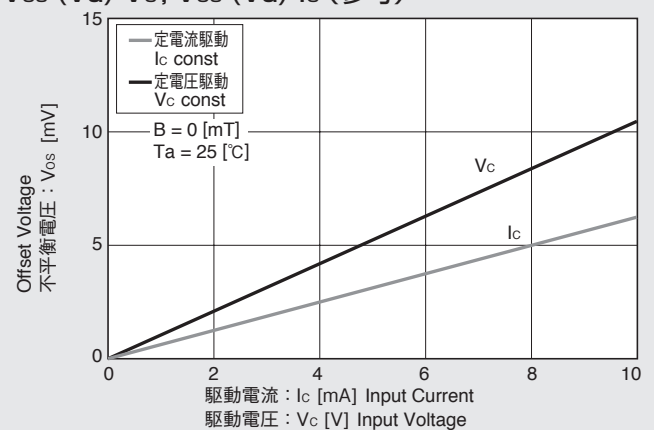
V<sub>H</sub>-V<sub>c</sub>, V<sub>H</sub>-I<sub>c</sub>



V<sub>os</sub> (V<sub>u</sub>)-T (参考)



V<sub>os</sub> (V<sub>u</sub>)-V<sub>c</sub>, V<sub>os</sub> (V<sub>u</sub>)-I<sub>c</sub> (参考)



※Magnetic Flux Density  
1[mT]=10[G]

定電圧駆動  $R_{in}=600[\Omega]$ 、 $V_{os}=6.3$ [mV] [ $V_c=6$ [V]]の例  
 定電流駆動 同上素子  
 In This Example :  $R_{in}=600$  [ $\Omega$ ]、 $V_{os}=6.3$  [mV]、 $[V_c=6$  [V]]

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2013年2月1日現在

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February 1, 2013