

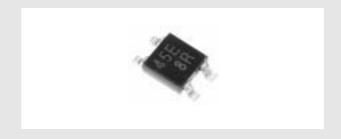
HG-176A

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	8	V
Max.Input Power	P _D	150	mW
Operating Temp. Range	Topr.	−40 ~ +125	°C
Storage Temp. Range	Tstg.	−40 ~ +150	°C



●Electrical Characteristics(Ta=25°C)

Item	Symbol	Conditions	Min.	Тур.	Max.	Unit
Output Hall Voltage	V _H *	B=50mT, V _C =6V	78		102	mV
Input Resistance	Rin	B=0mT, I_C =0.1mA	1,600	2,000	2,400	Ω
Output Resistance	R _{out}	B=0mT, I _C =0.1mA	3,200	4,000	4,800	Ω
Offset Voltage	V _{os} (V _u)	B=0mT, V _C =6V	-8		8	mV
Temp. Coefficient of V _H	αV _H	B=50mT, I_C =1mA Ta=25 \sim 125 $^{\circ}$ C			-0.07	%/C
Temp. Coefficient of Rin	αRin	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. $V_H = VHM - V_{os}(V_u)$ (VHM:meter indication)

 $\begin{array}{l} 2. \ \alpha V_{H} = \frac{1}{V_{H}(T_{1})} \times \frac{V_{H}(T_{2}) - V_{H}(T_{1})}{(T_{2} - T_{1})} \times 100 \\ 3. \ \alpha R_{in} = \frac{1}{R_{in}(T_{1})} \times \frac{R_{in}(T_{2}) - R_{in}(T_{1})}{(T_{2} - T_{1})} \times 100 \\ 4. \ \Delta K = \frac{K(B_{1}) - K(B_{2})}{[K(B_{1}) + K(B_{2})]/2} \times 100 \\ \end{array}$

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

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

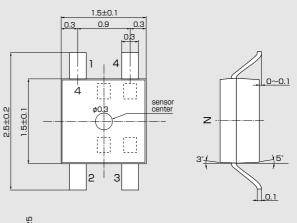
$$\mathsf{K} = \frac{\mathsf{V}_\mathsf{H}}{\mathsf{I}_\mathsf{C} \bullet \mathsf{B}}$$

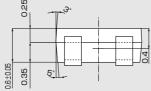
 $B_1 = 0.5T$, $B_2 = 0.1T$

Taping



Dimensional Drawing(Unit : mm)

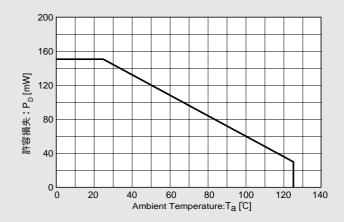




Pinning					
Input	1 (±)	3(±)			
Output	2(生)	4 (∓)			

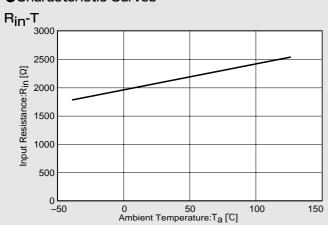
● Characteristic Curves

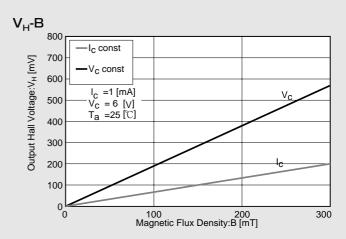
Allowable Package Power Dissipation

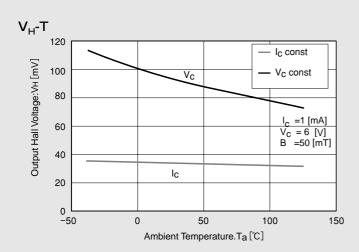


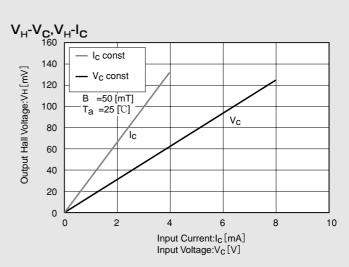
- •Please be aware that AKE products are not intended for use in life support equipment, devices, or systems. Use of AKE products in such applications requires the advance written approval of the appropriate AKE officer.
- Certain applications using semiconductor devices may involve potential risks of 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 AKE products in such applications is understood to be fully at the risk of the customer using AKE devices or systems.
- •Handling precautions required for preventing electrostatic discharge.
- •This product contains galium arsenide (GaAs) . Handling and discarding precautions required.

●Characteristic Curves

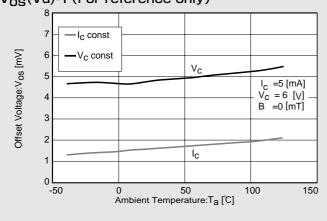




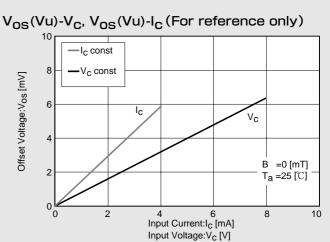








%Magnetic Flux Density
1[mT]=10[G]



In This Example : R_{in}=2064 (Ω), V_{OS}=4.78 (mV), [V_C=6 (V)]

b

С

g

h

i

k