

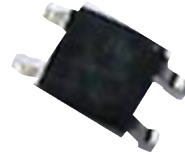
# Gallium Arsenide GH-701

# Hall Sensors

Hall Sensors

## Description

GH-701 Hall sensor is a four terminal solid-state device that produces an output voltage,  $V_H$ , proportional to the product of the input current,  $I_C$ , and the magnetic flux density,  $B$ . The composition is made of Gallium Arsenide (GaAs) encapsulated in a surface mount package.



## Features

- Low Cost
- Gallium Arsenide
- Extended Frequency Range
- Extended Temperature Range

SPECIFICATIONS	UNITS	GH-701
Input resistance, $R_{in}$ (3)	ohms	650 to 850
Output resistance, $R_{out}$ (3)	ohms	650 to 850
Magnetic sensitivity, $V_H$ (2)	mV/kG	59-106
Max. resistive residual (1) voltage, $V_M$ @ $B=0$	$\pm$ mV	$\pm$ 10
Max. control current @ 25°C, static air	mA	12
Nominal control current, $I_{cn}$	mA	5
Max. linearity error, (-10 kG to +10 kG)	$\pm$ % of RDG	2
Mean temperature coefficient of $V_H$ (-10°C to +80°C)	$\%$ /°C	-0.06
Mean temperature coefficient of (3) resistance ( $R_{in}$ ) (25° to 125°C)	$\%$ /°C	0.3
Temperature dependence of resistive residual voltage (-10°C to +80°C)	$\pm$ $\mu$ V/°C	8 typical
Operating temperature range	°C	-40 to 125
Storage temperature range	°C	-40 to 150

### Notes

- (1) Nominal Control Current,  $I_{cn} = 5$ mA
- (2)  $B = 1$ kG @  $I_C = 5$ mA
- (3)  $B = 0$ G,  $I_C = 0.1$ mA



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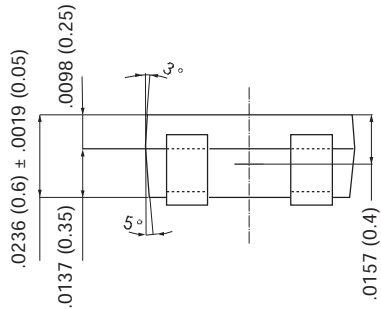
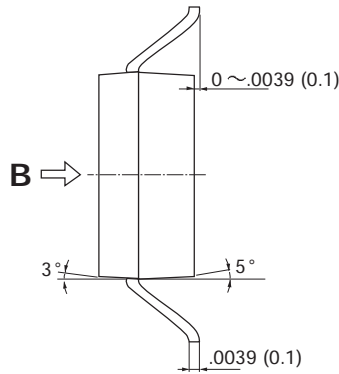
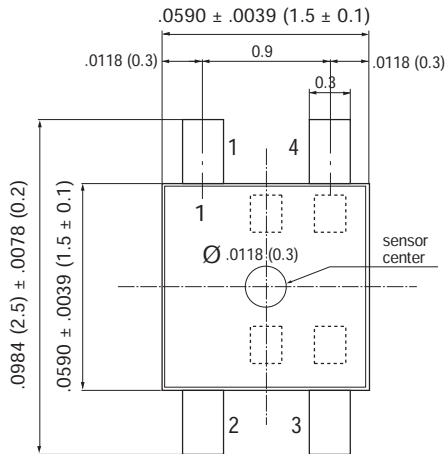
Rev. date 07/2008

# Mechanical Dimensions

All dimensions are in inches (millimeters)

## Model GH-701

# Hall Sensors



Pinning		
Input	1 (+)	3 (-)
Output	2 (+)	4 (-)

Pinning		
Input	1 (-)	3 (+)
Output	2 (-)	4 (+)

**Note:** Physical part is symmetrical and therefore part placement is identical in both orientations.

### Taping

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



**Note:** Due to continuous process improvement, all specifications are subject to change without notice.