

Indium Antimonide SH Series

Description

The SH series Hall effect sensors are four terminal Indium Antimonide devices that are extremely sensitive to low magnetic fields. These devices produce an output voltage, Vh, proportional to the product of the input current, Ic, and the magnetic flux density, B.

Features

- Low Cost
- Indium Antimonide
- Very High Sensitivity
- Low Current Requirement
- Choice of Mounting Configuration

Models

- 1. SH-400
- 2. SH-410
- 3. SH-420 4. SH-430

| SPECIFICATIONS | UNITS | SH-400 | SH-410 | SH-420 | SH-430 |
|---|-------|--------------|--------------|-------------|--------------|
| Input resistance, R _{in} | ohms | 240 to 550 | 240 to 550 | 240 to 550 | 240 to 550 |
| Output resistance, R out | ohms | 240 to 550 | 240 to 550 | 240 to 550 | 240 to 550 |
| Magnetic sensitivity, V _H (1) | mV/kG | 292 to 1,120 | 290 to 1,760 | 100 to 330 | 290 to 1,760 |
| Max. resistive residual voltage, V _M @ B=0 (1) | ±mV | 20 | 20 | 16 | 20 |
| Max. control current @ 25°C, static air | mA | 20 | 20 | 20 | 20 |
| Nominal control current, I _{cn} | mA | 5 | 5 | 5 | 5 |
| Mean temperature coefficient of V _H (0°C to +40°C) (1) | %/°C | - 1.8 | - 1.8 | -1.8 | -1.8 |
| Mean temperature coefficient of resistance (0°C to +40°C) (2) | %/°C | -1.8 | - 1.8 | -1.8 | -1.8 |
| Operating temperature range | °C | -40 to +110 | -40 to +110 | -40 to +110 | -40 to +110 |
| Storage temperature range | °C | -40 to +125 | -40 to +125 | -40 to +125 | -40 to +125 |

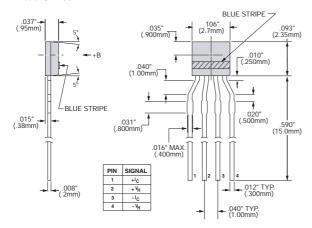
Notes

- (1) Nominal Control Current, $I_{cn}=5$ mA (2) Control Current=0.1 mA

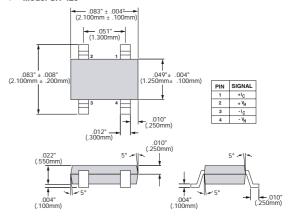
Mechanical Specifications

All dimensions are in inches (millimeters).

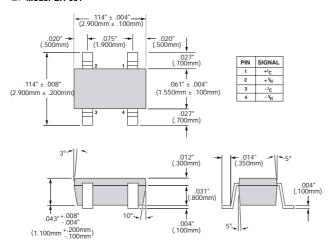
1. Model SH-400



3. Model SH-420



2. Model GH-601



4. Model SH-430

