



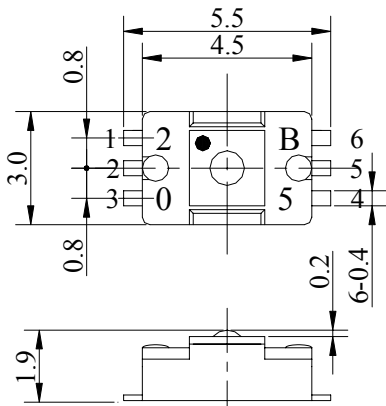
## Model No. HFD-500S

Utilizing long home-nurtured silicon micro-machining technology as core technology, we made it possible to precisely detect micro force less than 1N, which otherwise can not be achieved with conventional method.

### ■ Features

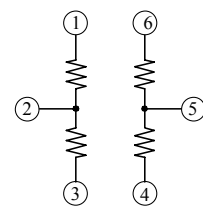
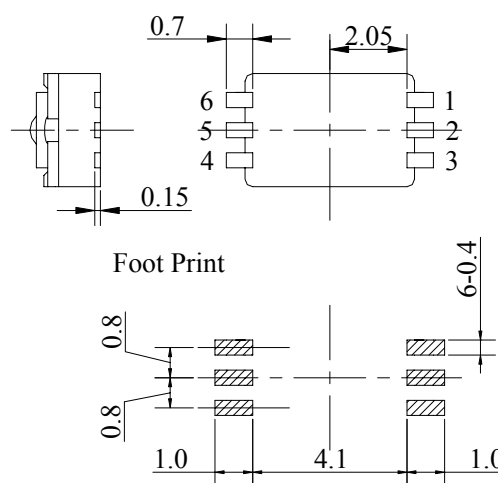
- Small size Low profile
- Outline dimension 5.5 × 3.0 × 1.9mm
- Capable of Micro-Force Detection with High Sensitivity, High Precision
- High durability, Life cycle 1 million cycles or more

### ■ Outline Dimension



Unit : mm

Typical tolerance : ±0.1



Terminal

|   |         |
|---|---------|
| ① | Vcc     |
| ② | +OUTPUT |
| ③ | GND     |
| ④ | GND     |
| ⑤ | -OUTPUT |
| ⑥ | Vcc     |

### ■ Specification

#### 1. Maximum Absolute Rating

| Item                        | Rating    | Unit | Remark |
|-----------------------------|-----------|------|--------|
| Applicable force            | 10        | N    |        |
| Supply Voltage              | 5.5       | Vdc  |        |
| Storage Temperature Range   | -40 ~ +85 | °C   |        |
| Operating Temperature Range | -20 ~ +60 | °C   |        |

#### 2. Rating (Vcc=2.8Vdc, Ta=25°C)

| Item                              | Rating |      |      | Unit    | Remark             |
|-----------------------------------|--------|------|------|---------|--------------------|
|                                   | Min.   | Typ. | Max. |         |                    |
| Operating Force Range             | 0      | -    | 10   | N       |                    |
| Supply Voltage                    | -      | 2.8  | -    | Vdc     |                    |
| Bridge Resistance                 | 18     | 25   | 32   | kΩ      |                    |
| Offset Voltage                    | -10    | -    | 10   | mV      |                    |
| Full Scale Span                   | 120    | 130  | 140  | mV      |                    |
| Sensitivity                       | -      | 13   | -    | mV/N    |                    |
| Linearity                         | -3     | -    | 3    | %FS     | FS=Full Scale Span |
| Offset Temp. Characteristics      | -5     | -    | 5    | mV      | -20 ~ +60°C        |
| Sensitivity Temp. Characteristics | -0.1   | -    | 0    | mV/N/°C | -20 ~ +60°C        |

### ■ Model Designation

HFD-500S

