



Force Sensor

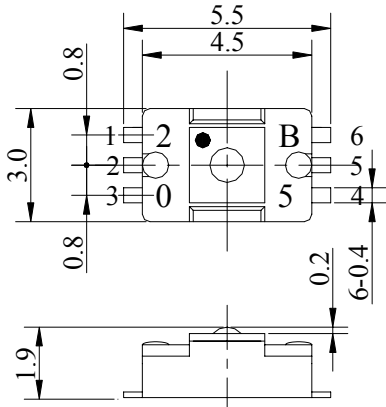
Model No. HFD-500S

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

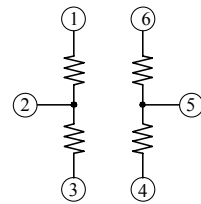
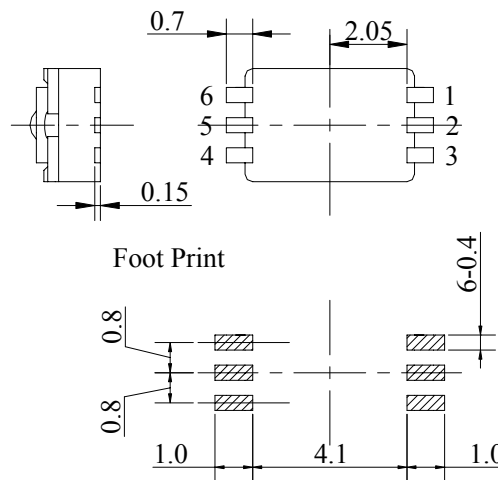
- Small size Low profile - Outline dimension 5.5 × 3.0 × 1.9mm
- Capable of Micro-Force Detection with High Sensitivity, High Precision
- High durability, Life cycle 1 million cycles or more

■ 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

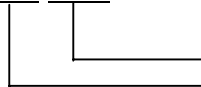
| Item | Rating | Unit | Remark |
|-----------------------------|-----------|------|--------|
| Applicable force | 10 | N | |
| Supply Voltage | 5.5 | Vdc | |
| Storage Temperature Range | -40 ~ +85 | °C | |
| Operating Temperature Range | -20 ~ +60 | °C | |

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



Low profile type
Model No.