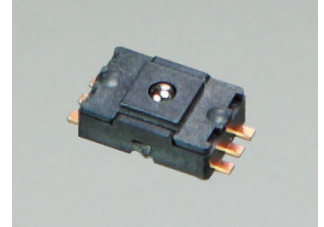


Model No. HFD-500S

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.

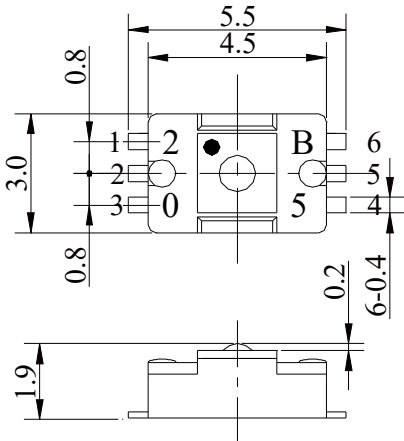
■ Features

- 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



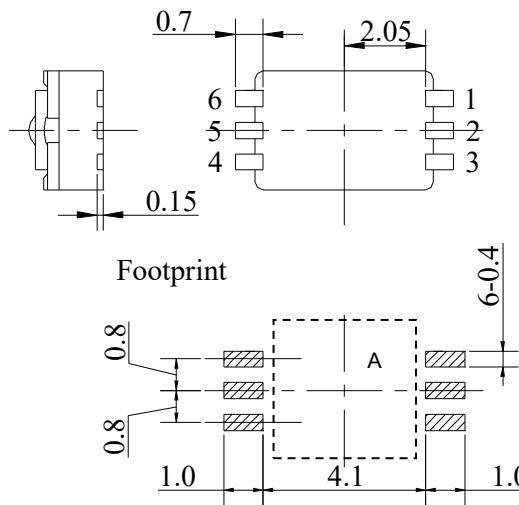
Model No. HFD-500S

■ Outline Dimension



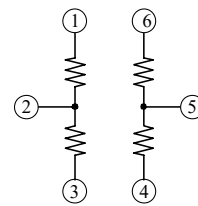
Unit : mm

Typical tolerance : ±0.1



Footprint

A : Pattern restricted area



Terminal

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

■ Specification

1. Maximum Absolute Rating

Item	Rating			Unit	Remark
Supply Voltage	-	-	5.5	Vdc	
Storage Temperature Range	-40	-	85	°C	
Operating Temperature Range	-20	-	60	°C	
Breaking Load	70	-	-	N	Including shock
Life	1000k	-	-	Cycles	5 ~ 10N 60Hz(Sine wave)
Reflow Temperature	-	-	250	°C	60 sec or less at 230°C or more,
			10	sec	2 times Max.

2. Rating (Ta=25°C, Vcc=Usable at less than 5.5V)

Item	Rating			Unit	Remark
	Min.	Typ.	Max.		
Operating Force Range	0	-	10	N	
Bridge Resistance	18	25	32	kΩ	
Offset Voltage	-10	-	10	mV/V	Output Voltage when 0[N] is applied *1, *2
Sensitivity	-	4.7	-	mV/V/N	
Linearity	-3	-	3	%FS	FS=Full Scale Span
Offset Temp. Characteristics	-5	-	5	mV	Δ from +25°C
Sensitivity Temp. Characteristics	-0.1	-	0	mV/N/°C	-20 ~ +60°C

*1 The sensor output (Output Voltage) is ratiometric to the drive voltage

*2 OUTPUT Voltage = (+OUTPUT Voltage) - (-OUTPUT Voltage)

*3 Please consult us separately for medical and automotive use.