



# Force Sensor

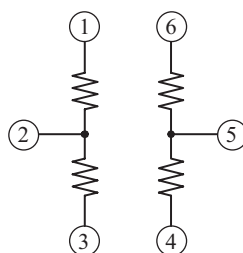
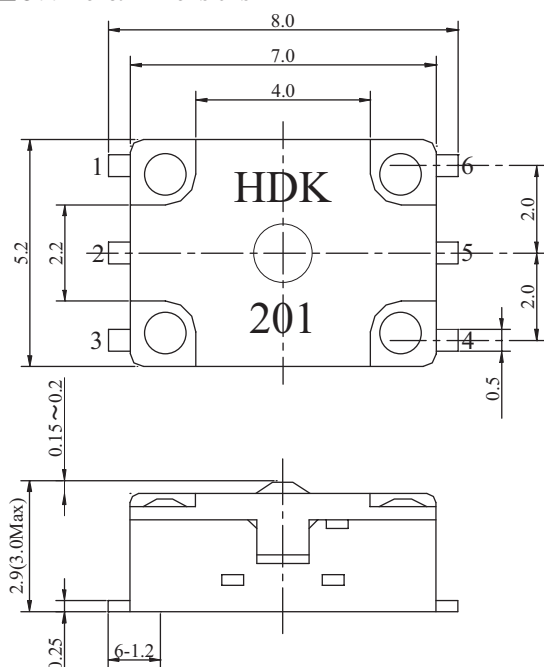
HFD-500

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 Package Dimension  $7.0 \times 5.2 \times 2.9\text{mm}$
- Capable of Micro-Force Detection with High Sensitivity, High Precision
- High durability, withstanding overforce 45N, Repetitive Force more than 1 million cycles

## ■Outline & Dimensions



Terminal

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

## ■Specifications

### 1.Maximum Absolute Ratings

Item	Rating	Unit	Note
Maximum Force	10	N	
Destructive Force	45	N	Load speed:1mm/min
Supply Voltage	5.5	Vdc	
Storage Temperature	-30 ~ +85	°C	
Operating Temperature	-20 ~ +60	°C	

### 2.Rating(Vcc=3.3Vdc, Ta=25°C)

Item	Rating			Unit	Note
	Min.	Typ.	Max.		
Operating Force Range	0	-	5	N	
Supply Voltage	-	3.3	-	Vdc	
Bridge Resistance	7	9	11	KΩ	
Offset Resistance	-10	-	10	mV	
Full Scale Span	-	100	-	mV	
Sensitivity	18	20	22	mV/N	
Linearity	-3	-	3	%FS	
Offset Temp. Characteristics	-5	-	5	mV	-20 ~ +60°C
Sensitivity Temp. Characteristics	-0.1	-	0	mV/N/°C	