

## Film Pressure Sensor

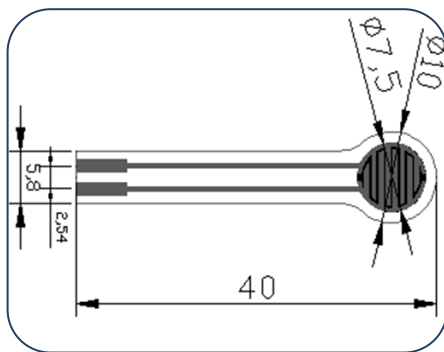
DF9-40@20kg

V2.0



The Leanstar® film pressure is a flexible pressure sensing technology which adopted by Leanstar in Suzhou. Printing flexible nano-functional materials with strong adhesion, bending resistance and high sensitivity on flexible and thin materials which enables it to achieve high sensitivity detection to pressure.

### ● Product Feature



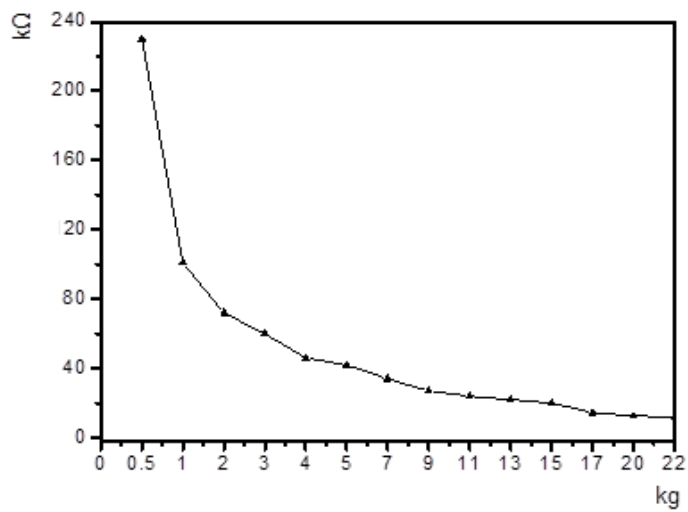
Item	Size (mm)
Length	40
Outside diameter of sensing area	10
inside diameter of sensing area	7.5
Pin pitch	2.54
Tolerance	0.2

- Size can be customized.
- Thickness is less than 0.3mm.
- Certified by ROHS.

Film pressure sensor DF9-40@20kg is based on new-type nanometer pressure sensitive materials, which supplemented by ultrathin film substrate of Young's modulus and disposable pater. It has both waterproof and pressure-sensitive functions. The resistance value of the sensor changes when the sensor perceives pressures from the outside. The pressure signal can be converted into the corresponding electrical signals with a simple circuit.

Performance	Parameter
Force Range	0-20kg
Thickness	< 0.3mm
Sensitive Point	< 70g
Repeatability	<±6.6%(50% of the load )
Precision	±5%
Durability	> 1 Million times
Initial Resistance	> 10MΩ(Unloaded)
Response Time	< 1ms
Recovery Time	< 15ms
Testing Voltage	DC 3.3V
Working Temp	-20°C - 60°C
EMI	N/A
ESD	N/A

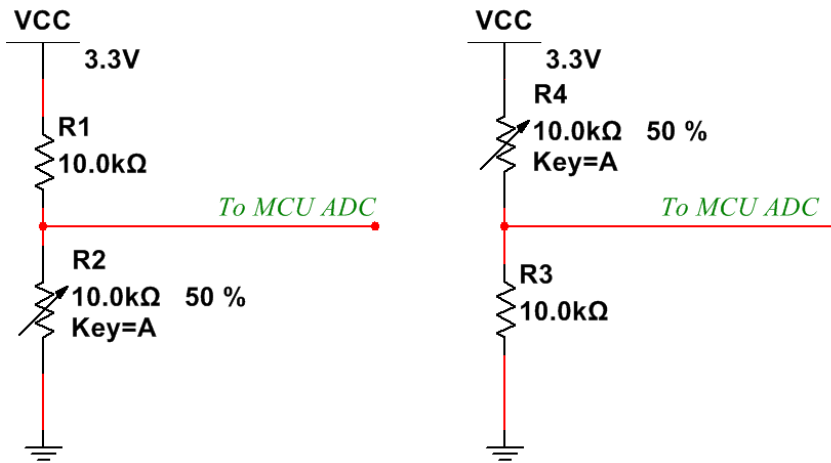
## ● Pressure-sensitive Characteristic



Pressure-sensitive Graph

## ● Reference Circuit

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## ● Attentions:

- ✚ Try to keep the force load evenly and avoid pointed objects contacting to the sensor.
- ✚ Outrange force application will reduce sensitive performance and even damage sensors.
- ✚ Pressure-sensitive curve for your reference only.