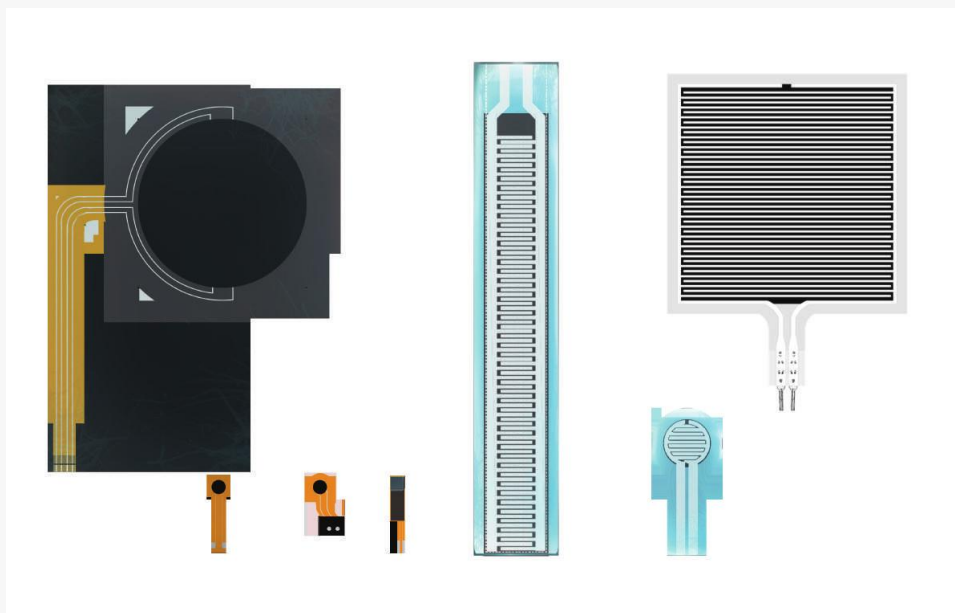


## SensorsX

# SX-PFZAAC02 Series

Resistive Flexible Film Pressure Sensor — Touch & Pulse Sensing

Touch Sensing | Pulse Detection | Wearables | IoT Devices

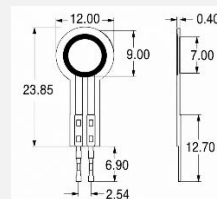


|                                                 |                                                   |                                         |
|-------------------------------------------------|---------------------------------------------------|-----------------------------------------|
| <b>30-300 gf (0.29-2.94 N)</b><br>Sensing Range | <b>0.3 mm</b><br>Thickness                        | <b>30 gf (0.29 N)</b><br>Response Point |
| <b>&lt; 5 ms</b><br>Response Time               | <b>&gt; 10 MΩ</b><br>Initial Resistance (no load) | <b>2.5 V - 4.6 V</b><br>Test Voltage    |

Touch Sensing | Pulse Detection | Wearables | IoT Devices

### ■ PRODUCT OVERVIEW

The SX-PFZAAC02 Resistive Flexible Film Pressure Sensor is designed specifically for touch and pressure sensing applications. It offers high sensitivity, flexibility, and bend resistance. Based on flexible nano-material technology, the response time is less than 5 ms. Long service life with capability to withstand more than 1,000,000 repeated presses. Low power consumption with near open-circuit state at standby. Sensor shape, measurement range, and minimum response point are all customizable.



### ■ KEY FEATURES

|                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>◆ <b>High Sensitivity</b> Designed for touch pressure sensing with high sensitivity</li> <li>◆ <b>Fast Response</b> Nano-material technology with response time &lt; 5 ms</li> <li>◆ <b>Low Power</b> Near open-circuit state at standby; low power consumption</li> </ul> | <ul style="list-style-type: none"> <li>◆ <b>Flexible &amp; Bend-Resistant</b> Flexible construction that withstands repeated bending</li> <li>◆ <b>Long Service Life</b> Withstands &gt; 1,000,000 repeated presses</li> </ul> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### ■ TYPICAL APPLICATIONS

#### Industries Served

|                                     |                                  |                           |
|-------------------------------------|----------------------------------|---------------------------|
| • Touch pressure sensing interfaces | • Pulse and heart rate detection | • Wearable health devices |
| • Smart Seat Cushion                | • Consumer electronics           | • IoT devices             |

## ■ PERFORMANCE SPECIFICATIONS

### Sensing

|                    |                             |
|--------------------|-----------------------------|
| Model Number       | SX-PFZAAC02                 |
| Sensing Range      | 30-300 gf (0.29-2.94 N)     |
| Sensor Thickness   | 0.3 mm                      |
| Response Point     | 30 gf (0.29 N)              |
| Overall Dimensions | See dimension drawing below |

### Electrical

|                    |                   |
|--------------------|-------------------|
| Initial Resistance | > 10 MΩ (no load) |
| Test Voltage       | 2.5 V - 4.6 V     |

### Environmental

|                       |                              |
|-----------------------|------------------------------|
| Operating Temperature | -20 to 100 °C (-4 to 212 °F) |
|-----------------------|------------------------------|

### Mechanical

|               |                                            |
|---------------|--------------------------------------------|
| Durability    | > 1,000,000 flex cycles (repeated presses) |
| Response Time | < 5 ms                                     |

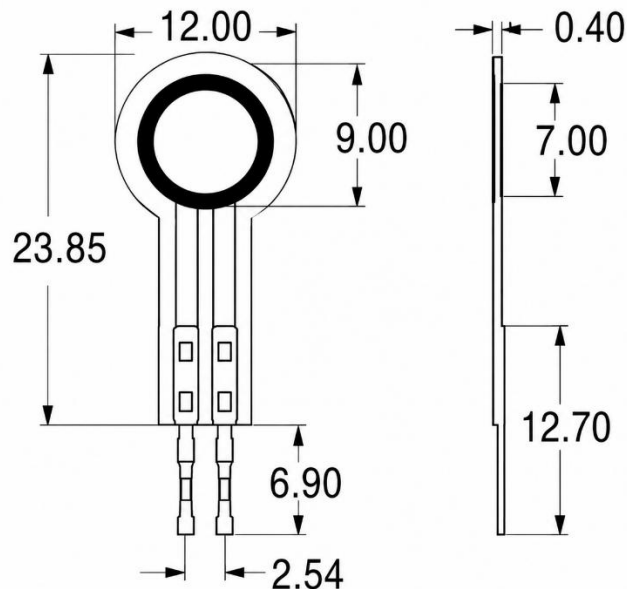
### EMC

|                 |                |
|-----------------|----------------|
| EMI Emissions   | None generated |
| ESD Sensitivity | Insensitive    |

### Customization

|                        |                                                                         |
|------------------------|-------------------------------------------------------------------------|
| Shape                  | Customizable sensor shape — contact factory                             |
| Range & Response Point | Customizable sensing range and minimum response point — contact factory |

## ■ MECHANICAL DIMENSIONS



※ Sensor shape, sensing range, and minimum response point are customizable. Contact SensorsX Technology Inc. for custom configurations.