

# MEMBRANE POTENTIOMETER LINEAR

PTX1S

**Datasheet** 

#### **Features**

**SHUNT Mode** 

Linear slider position sensing

Can be use with stylus, finger, glovers

Flexible and lightweight

Ultra-thin

Instant responding sensitivity

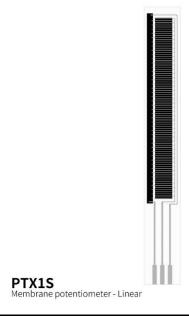
Low actuation force

Low power consumption

Robust

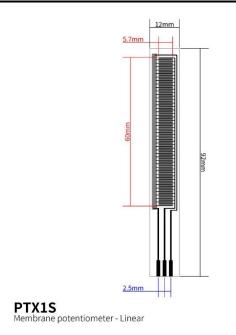
Easy to integrate

Can be use without a microprocessor





## **Technical specifications**



Sensor	PTX1S
1	03
Length test	92mm
Width	12mm
Active area	60mm x 5.7mm
Pin spacing	2.5mm
Nominal thickness	0.33mm
Substrate	PET
Sensor style	Close
Connector	3-pin male solder tabs
Thickness	0.73mm
Width	1.6mm

**Note**: Ceradex offer customize sensor solution for application-specific integration. Including the sensor's dimension, single-zone or multi-zone sensing area, connector options, waterproofs, humidity tolerance, and heat tolerance. Contact us for more information.

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## **Characteristics**

Sensor type	Shunt mode
Position resolution	≤ 1.5mm
Actuation force	≤ 200 g/cm²
Non-actuated resistance	> 10M Ω (Ohm)
Response time	< 40 ms
Operation temperature	-20°C - +60°C

# Durability

Tap durability	1kg/1Hz	> 10M actuation
Standing load durability	2.5kg/24hr	< 5%
Operating temperature performance		
Cold	-40°C/1hr	< 5%
Hot	+60°C/1hr	<15%
Storage temperature performance		
Cold	-40°C/1hr	< 10%
Hot	+60°C/1hr	<15%

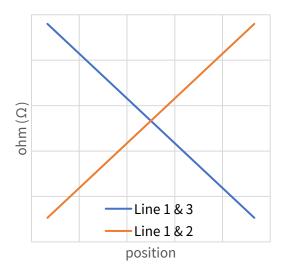
# Safety

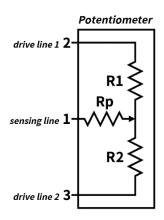
Maximum driving power	< 240mW
Electromagnetic interference (EMI)	No
Electrostatic discharge (ESD)	No



#### **Response curve**

### **Electrical layout**





**Note**: Position resolution, and actuation force can be modified in Ceradex's customized sensor solution.

# **Applications**

#### User Interface

Fluid control

Can be operated under glove-wearing conditions and detects touch/press control as dimmer and scrollbar.

Micro adjustment in flow control and pumping rate.

Implant diagnosis

Electronics surface for production flow analysis and monitoring.

# **CERADEX**

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