

SCS15 High Frequency Response Pressure Sensor



Features

- Good dynamic frequency response
- Self developed MEMS high temperature pressure resistance sensitive chip
- Good long-term stability
- Wide measurement range

Description

SCS15 high frequency response pressure sensor uses micromachining technology to make the effective size of integrated silicon diaphragm small, so its natural frequency is high. Taking advantage of the excellent elastic mechanical properties of silicon and the low impedance in the bridge, it is conducive to obtain high-frequency response, low to zero frequency, high to wide-band response close to the natural frequency, low to microsecond rise time and very smooth amplitude frequency characteristic curve. The comprehensive performance is better than that of piezoelectric dynamic pressure sensor, and the dynamic frequency response is very high (up to 1MHz).

This series of sensors are suitable for chemical explosion test, petroleum exploration and production and logging, materials, mechanics, wood engineering, rock mechanics, trauma medicine, hydraulic power mechanical test and other scientific tests and modern instruments. They measure some dynamic pressure waveforms, amplitudes and effective values with high variation and steep waveform. They are the first choice for dynamic pressure measurement.

Performance Specifications

Dynamic Frequency Response	Better than 500KHz (Up to 1MHz)
Measuring Medium	Various liquids or gases compatible with silicon, stainless steel and glass
Range	3MPa
Comprehensive Accuracy	0.25%
Power Supply	1.5mA、5mA、5V
Zero Output	$< \pm 2\text{mV}$
Insulation Resistance	100M Ω (50VDC)
Full Scale Output	30mV \pm 10mV

Overload Pressure	$\geq 200\%F.S.$
Response Time	Microsecond(10%~90%)
Working Temperature	-50°C~200°C
Storage Temperature	-40°C~125°C
Relative Humidity	0%~85%

Structures and Dimensions

