



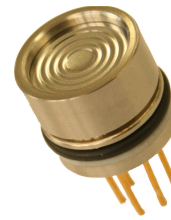
Preliminary

MS54-SP/AP

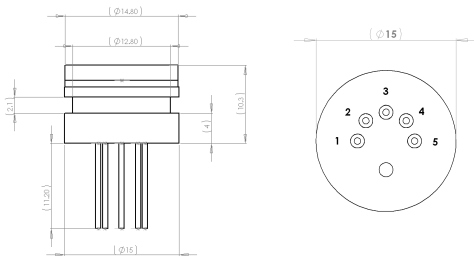
Piezoresistive OEM $\Phi 15$ mm

Sealed Gauge / Absolute Pressure Sensors

硅压阻式密封表压 / 绝压传感器

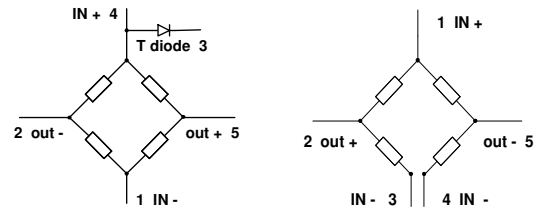


Dimension / 尺寸



Housing type 3 / 壳体类型 3

Electrical connection / 引线方式



C – Close bridge 闭桥

O – open bridge 开桥

Feature

- Pressure range from 100 bar to 600 bar
- Piezoresistive silicon chip as sensing elements
- Specific for 5V or 1.5 mA excitation
- Steel less 316L housing 15 mm
- Sensing elements protected by steel less diaphragm
- Silicon Oil filling
- high resistance against aggressive media
- High flexibility for customized version

特性

- 压力范围 100-600 bar
- 硅压阻芯片作为敏感元件
- 5V 电压或 1.5mA 电流被设计为硅压阻电桥的最佳供电条件
- 直径为 15 毫米机壳与膜片使用不锈钢 316L 材料
- 敏感元件通过不锈钢膜片与测量介质隔离
- 介质压力通过硅油传递到传感器芯片上
- 很高的抗介质腐蚀的能力
- 方便用户自行灵活设计和生产变送器

Typical applications

The OEM sensors are used for building up the industrial pressure transducers for the applications as:

- aviation electronic
- servo control, robotics
- hydraulics
- sanitary
- pharmaceutical engineering
- chemistry
- injection engineering
- as well as level measurements

应用范围

应用 OEM 传感器组成工业压力变送器有以下用途:

- 航空电子
- 传动控制, 摇控设备(机器人)
- 液压系统
- 环境卫生
- 医药工程
- 石油、化学工业
- 汽车工业
- 液位测量



Preliminary

Specifications / 特性

	Unit 单位	Min. 最小值	Typ. 典型值	Max. 最大值
Bridge resistance / 桥路电阻	kΩ	2.7	3.2	3.7
Offset / 零点输出	mV	-25	-	+25
Sensitivity / 灵敏度	mV/bar	0.3	-	1.
Span / 满量程	mV	95		370
Repeatability / 重复性	%FS	-0.02		0.02
Pressure Hysteresis / 压力回滞	%FS	-0.05		0.05
Offset Temperature Error / 零点温度误差 (0 – 70 °C)	%FS/°C		0.017	
Offset Temperature Error / 零点温度误差 (-20 – 80 °C)	%FS/°C		0.020	
Span Temperature Error / 满量程温度误差 (0 – 70 °C)	%FS/°C		-0.18	
Span Temperature Error / 满量程温度误差 (-20 – 80 °C)	%FS/°C		-0.20	
Long term stability Offset / 零点长期稳定性	%FS/Y	-0.1		0.1
Offset Thermal Hysteresis / 零点温度回滞	%FS	-0.05		0.05
Span Thermal Hysteresis / 满量程温度回滞	%FS	-0.05		0.05
Operating temperature / 工作温度	°C	-40		+120
Storage temperature / 存储温度	°C	-50		+130
Testing temperature / 测试温度范围	°C	-20		+80
Temperature coefficient of the diode / 温度 二极管的温度灵敏度 $I_f=50 \mu A$	mV/°C		2.2	

Standard ranges / 标准量程

Pressure range 压力量程范围 P [Bar]	Full scale 满量程 V [mV]	Over pressure 过载能力 Bar	Non-linearity 非线性 [% FS]
100	120	3 x FS	±0.2
250	200	400	±0.25
400	320	600	±0.25
600	320	800	±0.25

Test conditions/试验条件: $T_a = 25 \text{ °C}$, $V_{DD} = 5 \text{ V}$
(or $I_{DD} = 1.5 \text{ mA}$)

Ordering information / 订货信息

MS54 - AP 10.00 - 1 O

