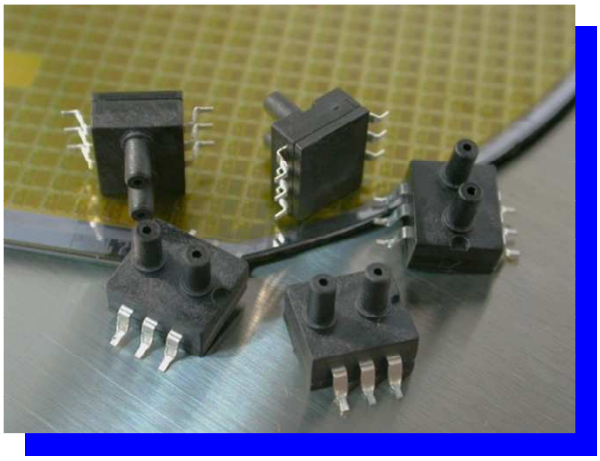
Solid State Pressure Sensor

ANALOG OUTPUT

SLP Series - Model 35A Low Pressure

FEATURES

- Easy Design-in
- Temperature Compensated
- Calibrated & Amplified Output
- Low Cost



APPLICATIONS

- Process Control
-
- Consumer Electronics
- Medical Devices

DESCRIPTION

The SLP 35A Series are fully compensated and amplified pressure sensors. The series is easily one of the smallest dual port pressure sensors on the market today and enables differential pressure sensors to be fitted into the most compact of enclosures.

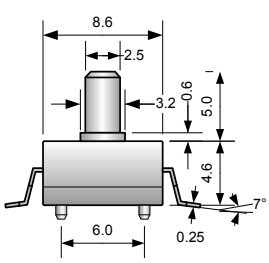
The Series employs the latest ASIC technology with temperature compensation of span, offset and linearity. Calibration coefficients are stored in an on-board EEPROM.

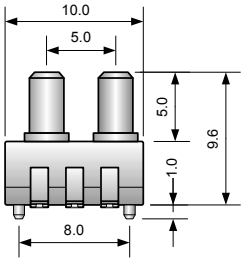
Pressure ranges are available from 0.3 to 30 psi. Ratiometric output at 5V excitation is 0.5 to 4.5 V. Pressure connection is through Tygon tube on the pressure port.

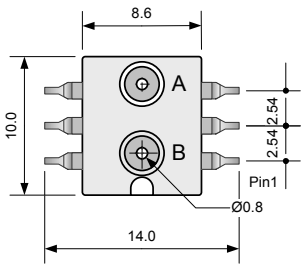
Custom calibrations are available please contact the factory for details.

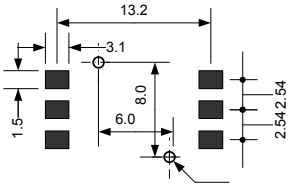
Parameters	Min	Typ	Max	Unit
Supply Voltage Note 4	2.7 to 3.3		4.5 to 5.5	Vdc
Supply Current			3.0	mA
Pressure Range Note 3	0.3		3	psi
Offset	0.320	0.500	0.680	V
Span Output		4.00		V
Response Time		1	2	ms
Accuracy Note 1			±4.5	%FS
Output Current of Buffer			2.2	mA
Over Pressure Note 5			3X or 2.5psi	Rated Pressure
Temp - Compensated	0		50	°C
Temp - Operating	-20		+85	°C
Temp - Storage	-40		+125	°C

NOTES:
1. Accuracy includes non-linearity, hysterisis, TCS and TCO inside the compensated temperature range, best fit straight line definition
2. Wetted material contains Pyrex glass, RTV, Au, silicon and PPS
3. See ordering information for list of available pressure ranges
4. Specify desired operating voltage range when ordering. Output is ratiometric to supply voltage
5. Whichever is higher









Foot Print

NOTES:
1. Port B is used for positive differential
2. Port A is used for absolute
3. Port B is used for gage
4. All dimensions are in mm
5. Recommended tubing 3(OD)mm 1.8 (ID) mm Tygon tube

Pin #	Description
1	N.C./Vss*
2	Out
3	Vdd
4	Vss
5	N.C.
6	N.C.

Notes:
1) N.C. pins must be left floating
2) A 0.1uF capacitor must be connected between Vdd and Vss

*Pin 1 is N.C. for 0.3, 0.5 and 1 psi ranges. For ranges of 2 psi and above pin 1 is Vss. When present, both Vss pins must be connected.

Ordering Information

35A L – L50 H – 3 2 10

Series

Operating Voltage
Blank = 4.5 to 5.5V
L = 2.7 to 3.3V

Range
L30 = 0.3 psi
L50 = 0.5 psi
001 = 1.0 psi
002 = 2.0 psi
003 = 3.0 psi

Type
D= Differential*
H= Gage (Dual Port)

Lead Direction
2 = Leads opposite side as tubes
3 = Surface Mount

Output
2 = 0.5V - 4.5V output

Option Code

Notes
*Differential has +XXX psi as the Full Scale Output and -XXX psi as the Offset. Maximum Differential pressure is 7 psi

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