

Solid State Pressure Sensor

ANALOG
OUTPUT

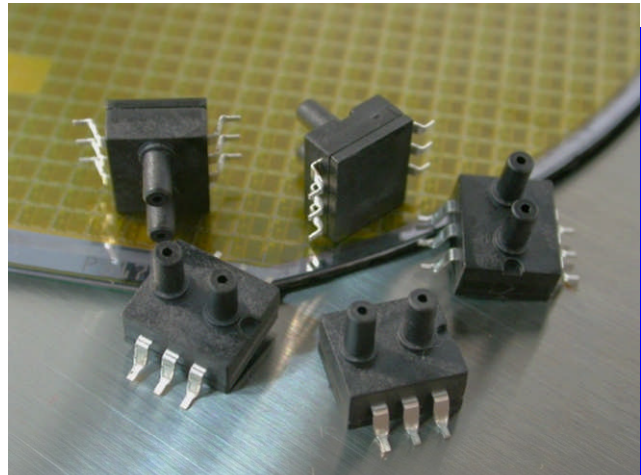
SLP Series - Model 35A

FEATURES

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

APPLICATIONS

- Process Control
- HVAC
- 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.

Characteristics

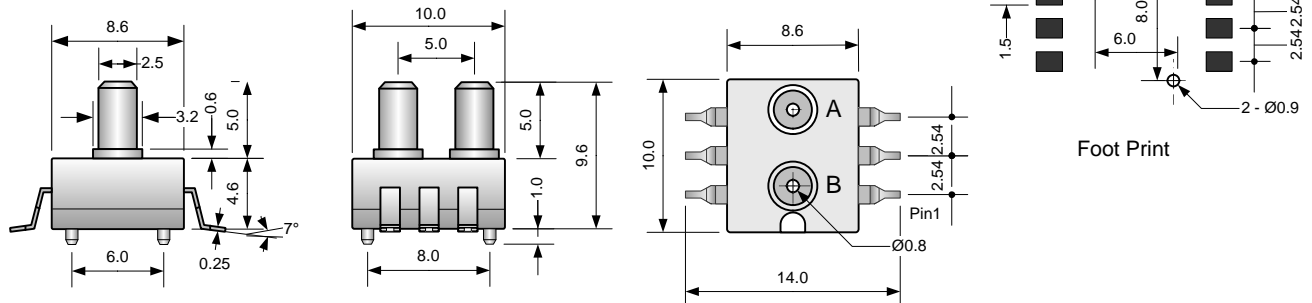
Unless otherwise specified, all parameters are measured at 25 °C, 60% RH and 5 Vdc excitation

Parameters	Min	Typ	Max	Unit
Supply Voltage ^{Note 4}	2.7 to 3.3		4.5 to 5.5	Vdc
Supply Current			2.5	mA
Pressure Range ^{Note 3}	5		30	psi
Offset	0.428	0.500	0.572	V
Span Output		4.00		V
Response Time		1	2	ms
Accuracy ^{Note 1}			±1.8	%FS
Output Current of Buffer			2.2	mA
Over Pressure ^{Note 5}			2x	Rated Pressure
Temp - Compensated	0		50	°C
Temp - Operating	-20		+85	°C
Temp - Storage	-40		+125	°C

NOTES:

1. Accuracy includes non-linearity, hysteresis, 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

Dimensions



Solder Reflow max. 250 °C 5 seconds

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

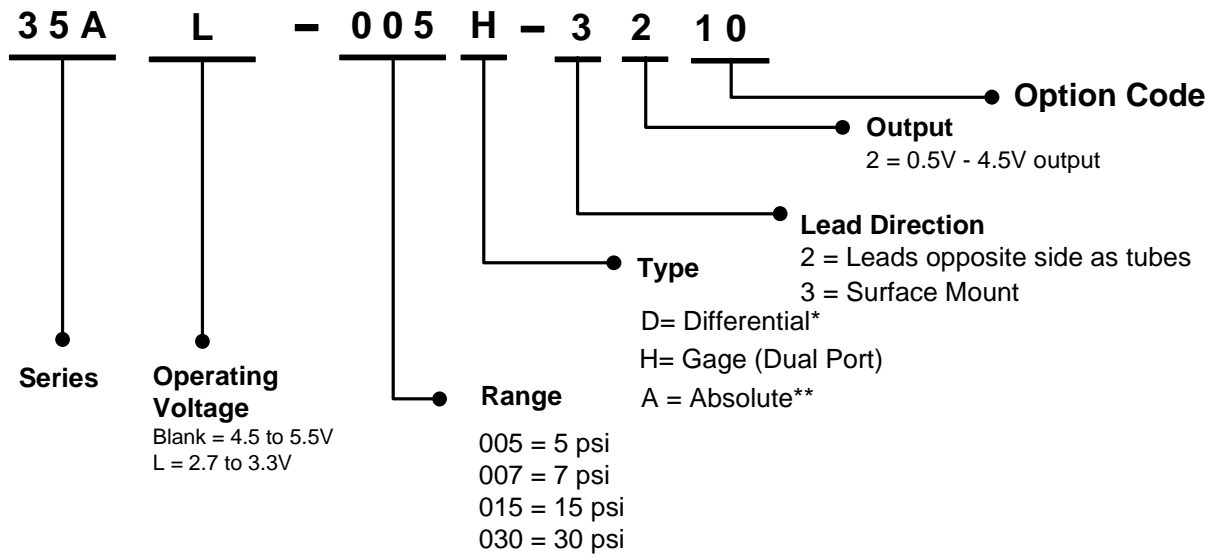
Pin #	Description
1	Vss
2	Out
3	Vdd
4	Vss
5	N.C.
6	N.C.

Notes:

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

Both Vss pins (1 & 4) must be connected.

Ordering Information



Notes

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

** Lowest Absolute pressure that can be specified is 15 psi

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