

# Solid State Pressure Sensor

DIGITAL  
OUTPUT



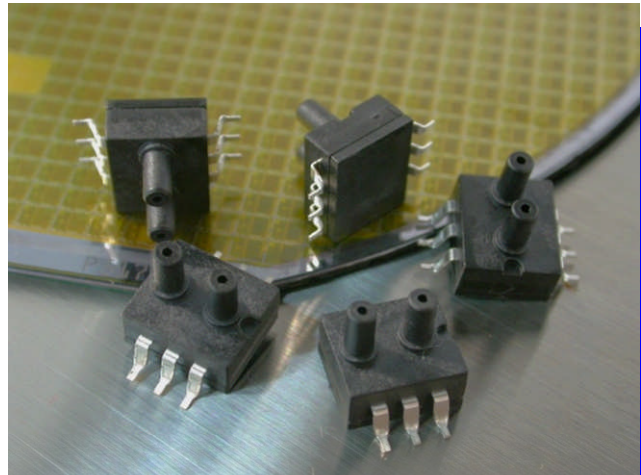
## SLP Series - Model 35D Low Pressure

### FEATURES

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

### APPLICATIONS

- Process Control
- HVAC
- Consumer Electronics
- Medical Devices



### DESCRIPTION

The SLP 35D Series are fully compensated digital 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. Digital output of the pressure signal is provided through a proprietary 1-wire interface.

Pressure ranges are available from 0.3 to 30 psi. Pressure connection is through Tygon tube on the pressure port.

Custom calibrations are available please contact the factory for details.

# Characteristics

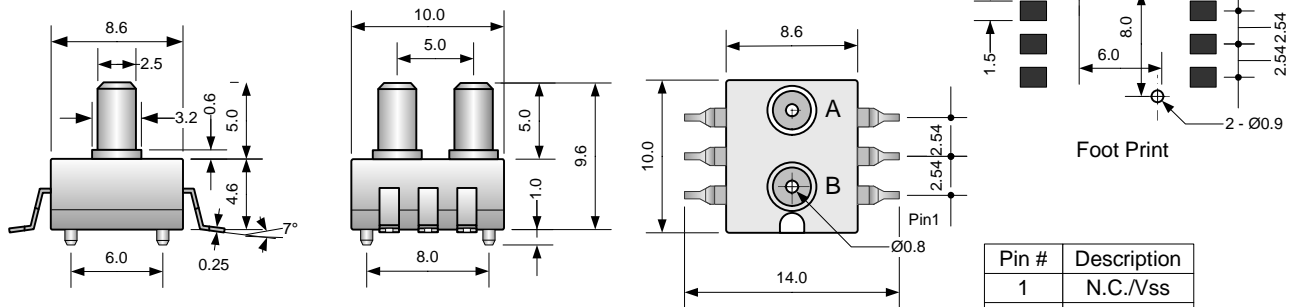
Unless otherwise specified, all parameters are measured at 25 °C, 60% RH and 5 Vdc excitation

Parameters	Min	Typ	Max	Unit
Supply Voltage <sup>NOTE 1</sup>	2.7 to 3.3		4.5 to 5.5	Vdc
Supply Current			2.5	mA
Pressure range <sup>Note 5</sup>	5		100	psi
Resolution		14		Bit
Accuracy <sup>NOTE 3</sup>		±4.5		%FS, +1 LSB
Zero Output		0666		Hex
Full Scale Output		3996		Hex
Warmup Time <sup>NOTE 4</sup>		1	2	sec
Start-Up Time			10	ms
Sampling Rate		1000		Hz
Temp - Compensated	0		50	°C
Temp - Operating	-20		+85	°C
Temp - Storage	-40		+125	°C
Over Pressure			3X or 2.5 psi	FS

**Notes:**

1. Specify desired operating voltage range when ordering. Output is ratiometric to supply voltage
2. Wetted material contains Pyrex glass, RTV, Au, silicon and PPS
3. Accuracy includes non-linearity, hysteresis, TCS and TCO inside the compensated temperature range, best fit straight line definition
4. Zero fluctuation below 0.15%
5. See ordering guide for list of available pressure ranges

## 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	N.C./Vss
2	Out
3	Vdd
4	Vss
5	N.C.
6	N.C.

**Notes:**

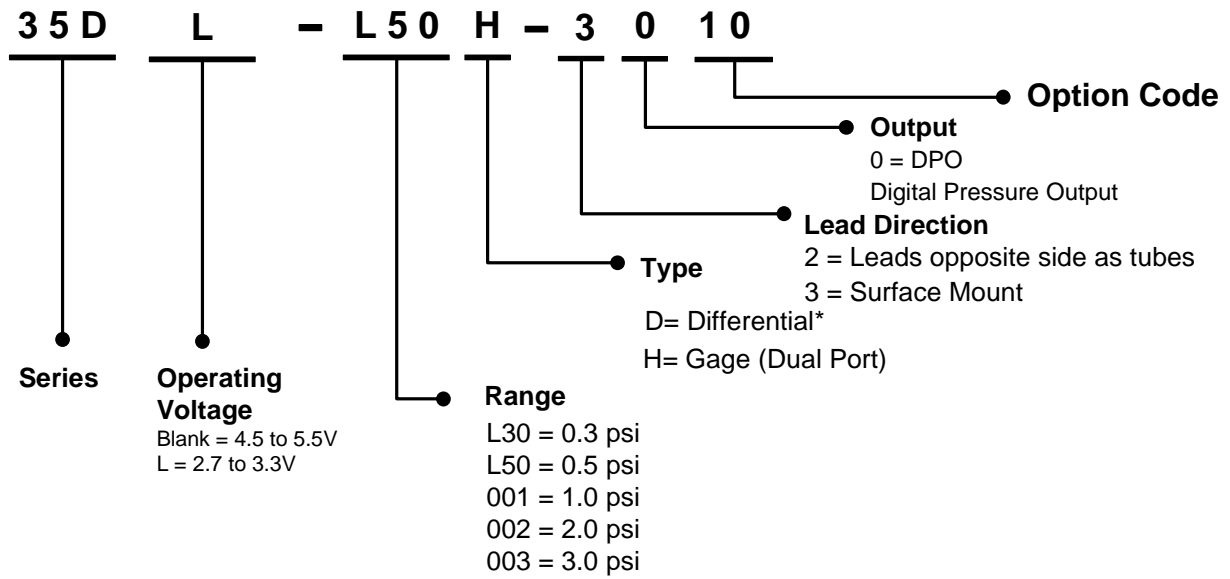
- 1) N.C. pins must be left floating
- 2) A 0.1uF capacitor must be connected between Vdd and Vss

\*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.



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## Ordering Information



### 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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