# ANALOG OUTPUT

### Solid State Pressure Sensor

#### SPD SERIES - Model 34A

#### **FEATURES**

- Low Cost
- Rigid Plastic DIP
- High Level Output
- High Impedance

#### **APPLICATION**

- White Goods
- Medical
- Process Control



#### **DESCRIPTION**

The SPD 34A Series is a piezoresistive silicon pressure sensor in 6-pin plastic DIP package. It is intended for high volume applications where the simplest pressure connection and low cost is required.

The pressure sensor consists of gage pressure chip that is attached to the housing directly. Pressure is applied to the back side of chip. It is designed to operate with non-corrosive media, such as air and fluid. A simple pressure interface is provided through the molded pressure port.

The SPD Series is amplified and temperature compensated via the latest ASIC technology. Calibration coefficients are stored via an on chip EEPROM. Customization is available, please contact the factory for details.



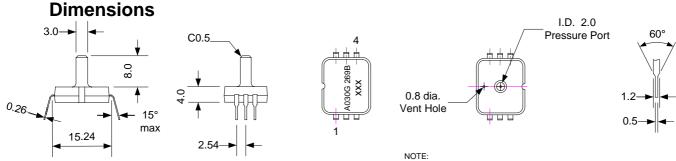
#### **Characteristics**

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

Parameters	Min	Тур	Max	Unit
Supply Voltage <sup>Note 3</sup>	2.7 to 3.3		4.5 to 5.5	Vdc
Supply Current			2.5	mA
Pressure Range <sup>Note 4</sup>	5		150	psi
Zero Output (Offset)	0.428	0.500	0.572	Vdc
Full Scale (Output)	4.428	4.500	4.572	Vdc
Response Time		1	2	ms
Output Current of Buffer			2.2	mA
Accuracy Note1			1.8	%FS
Over Pressure <sup>Note 5</sup>			2x	Rated Pressure
Temp - Compensated	0		50	°C
Temp - Operating	-20		+85	°C
Temp - Storage	-20		+85	°C

#### NOTES:

- 1. Accuracy includes non-linearity, hysterisis, TCS, TCO inside the compensated temperature range, Best Fit Straight Line definition
- 2. Wetted material contains RTV, PPA, glass and silicon
- 3. Specify desired operating voltage range when ordering. Output is Ratiometric to supply Voltage
- 4. See ordering guide for list of available pressure ranges
- 5. Over pressure is 1.3x for 150 psi range



Delivery: 64 pcs per tray

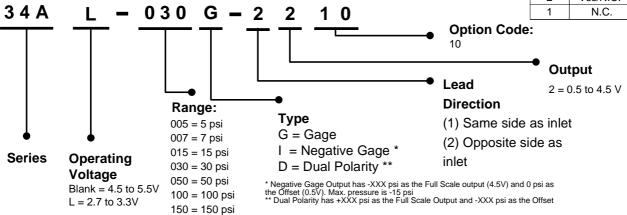
Note: Solder reflow max. 250 °C 5s

N.C. pins must be left floating
 A 0.1 uF capacitor between Vdd and Vss is

required
\* For 5 and 7 psi ranges Pins 2 & 6 must be connected. For other ranges Pin 2 must be N.C.

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

## **Ordering Information**





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#### Disclaimer/Warranty/Notice

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