Solid State Pressure Sensor



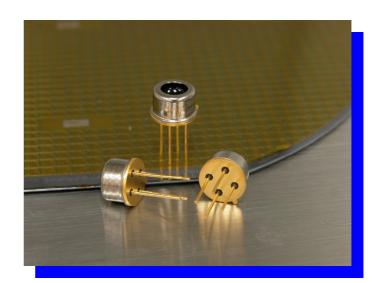
STD Series - Model 60A

FEATURES

- Solid State Reliability
- Absolute Pressure
- Rigid Package
- Low Cost

APPLICATIONS

- Barometer
- Cable Fault Detector
- Pneumatics
- Automotive



DESCRIPTION

The STD Series model 60A is an amplified silicon MEMs piezoresistive sensor in a reliable TO-5 metal can package. The sensor is suitable for mounting directly onto a printed circuit board.

This series is designed as a low cost absolute pressure sensor for higher pressures of up to 250 psiA (13.5 bar). The TO-5 package is easy to mount using an off-the-shelf o-ring.

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

The sensors are available in full scale ranges from 15 psiA to 250 psiA. For custom parts, please contact the factory for details.



Characteristics

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

Parameters	Min	Тур	Max	Unit
Supply Voltage Note 2	2.7 to 3.3		4.5 to 5.5	V
Supply Current			2.5	mA
Pressure Range Note 5	15		250	psiA
Zero Output (0 psiA)	0.428	0.500	0.572	V
Full Scale Output	0.428	4.500	4.572	V
Linearity		±0.15	±0.3	%FS
Accuracy ^{Note 1}			±1.8	%FS
Response Time		1	2	ms
Temp - Compensated	0		50	°C
Temp - Operating	-40		+125	°C
Temp - Storage	-40		+125	°C
Over Pressure ^{Note 4}			2X	Rated Pres.

Notes

- 1. Best Fit Straight Line Definition
- 2. Output is ratiometric to supply voltage
- 3. Wetted material contains Ni and Silicone Gel
- 4. Over pressure is 1.2x for 150, 200 and 250 psi pressure range
- 5. See ordering guide for list of available pressure ranges

Dimensions 2.54 x 2 0 + 0 Top View 0 5.8 dia. 8.2 (P.C.D.) 5.8 015A XXX Bottom View 0.55 10.0

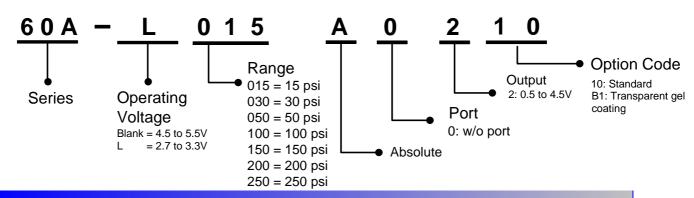
Lead	Connection		
1	Vdd		
2	Vdd/Vss ⁵		
3	Vss		
4	Out ⁴		
Case	N.C.		

NOTES:

- 1. Pins and header are Kovar with gold plating
- 2. Cap wo/tube is made of SPCC with nickel plating
- 3. Pins 1 & 2 must be connected by the user's PCB.
- 4. Case MUST be left floating
- 5. Pin 2 is Vss for 15 and 30 psi versions and is Vdd for all other pressure ranges.

Ordering Information

Soldering leads: max. 250 °C 5s





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