

Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[All Sensors Corporation](#)
[BARO-A-4V-MINI](#)

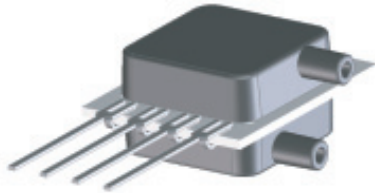
For any questions, you can email us directly:
sales@integrated-circuit.com

www.allensors.com Signed Original On File

www.allensors.com Signed Original On File

BAROMETRIC AMPLIFIED PRESSURE SENSORS

600 to 1,100 mbar Barometric Pressure Sensor



Features

- Barometric Pressure Range
- Temperature Compensated
- Calibrated Zero and Span

Applications

- Medical Instrumentation
- Environmental Monitoring
- Altimeters
- Chemical Analysis

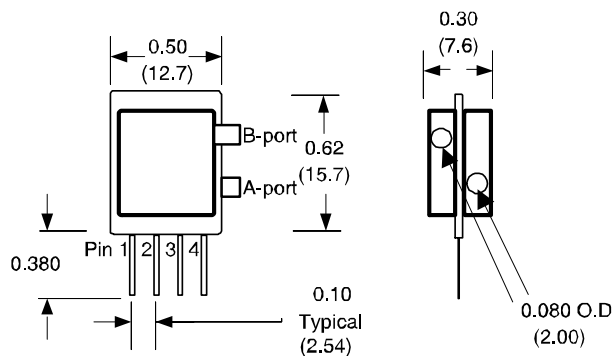
General Description

The Miniature Amplified Output pressure sensors is based upon a proprietary technology to reduce all output offset or common mode errors. This model provides a calibrated amplified output with superior output offset characteristics. Output offset errors due to change in temperature, stability to warm-up, stability to long time period, and position sensitivity are all significantly reduced when compared to conventional compensation methods. In addition the sensor utilizes a silicon, micromachined, stress concentration enhanced structure to provide a very linear output to measured pressure.

These calibrated and temperature compensated sensors give an accurate and stable output over a wide temperature range. This series is intended for use with non-corrosive, non-ionic working fluids such as air, dry gases and the like.

The output of the device is ratiometric to the supply voltage and operation from any D.C. supply voltage between 4.5 and 5.5 volts.

Physical Dimensions



Approvals

MKT	DATE	MFG	DATE	ENG	DATE	QA	DATE
<input type="checkbox"/> As Is <input type="checkbox"/> With Change		<input type="checkbox"/> As Is <input type="checkbox"/> With Change		<input type="checkbox"/> As Is <input type="checkbox"/> With Change		<input type="checkbox"/> As Is <input type="checkbox"/> With Change	

ALL SENSORS
www.allensors.com
E 408 225 2079
F 408 225 4314
P 408 225 4314
A 16035 Vineyard Blvd. Morgan Hill, CA 95037

www.allisensors.com® Signed Original On File

www.allisensors.com® Signed Original On File

Pressure Sensor Characteristics Maximum Ratings

Supply Voltage VS	+4.5 to +5.5Vdc
Lead Temperature (soldering 2-4 sec.)	250°C

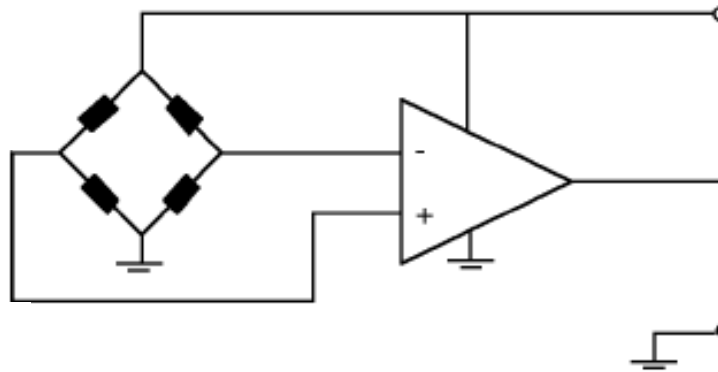
Environmental Specifications

Temperature Ranges	
Compensated	see specification
Operating	-25 to 85° C
Storage	-40 to 125° C
Humidity Limits	0 to 95% RH (non condensing)

Standard Pressure Ranges

Part Number	Operating Pressure	Compensated Range
BARO-A-4V-MINI	600 to 1,100 mbar	5 to 50° C
BARO-A-4V--MINI-PRIME	600 to 1,100 mbar	-25 to 85° C
BARO-A-4V-MINI-MIL	600 to 1,100 mbar	-40 to 125° C

Equivalent Circuit



www.allensors.com® Signed Original On File

Performance Characteristics for BARO-A-4V-MINI

Parameter, note 1	Minimum	Nominal	Maximum	Units
Operating Range, absolute pressure	600		1100	mBar
Output Voltage @1,100 mbar	4.15	4.25	4.35	volt
Output Voltage @ 600 mbar	0.15	0.25	0.35	volt
Offset Temperature Shift (5°C to 50°C), note 2			±20	mvolt
Linearity, hysteresis error, note 4		0.05	0.50	%fs
Span Shift (5°C to 50°C), note 2			±1	%span

Performance Characteristics for BARO-A-4V-MINI-PRIME

Parameter, note 1	Minimum	Nominal	Maximum	Units
Operating Range, absolute pressure	600		1100	mBar
Output Voltage @1,100 mbar	4.15	4.25	4.35	volt
Output Voltage @ 600 mbar	0.15	0.25	0.35	volt
Offset Temperature Shift (-25°C to 85°C), note 2			±20	mvolt
Linearity, hysteresis error, note 4		0.05	0.50	%fs
Span Shift (-25°C to 85°C), note 2			±1	%span

Performance Characteristics for BARO-A-4V-MINI-MIL

Parameter, note 1	Minimum	Nominal	Maximum	Units
Operating Range, absolute pressure	600		1100	mBar
Output Voltage @1,100 mbar	4.15	4.25	4.35	volt
Output Voltage @ 600 mbar	0.15	0.25	0.35	volt
Offset Temperature Shift (-40°C to 125°C), note 2			±20	mvolt
Linearity, hysteresis error, note 4		0.05	0.50	%fs
Span Shift (-40°C to 125°C), note 2			±1	%span

Specification Notes

- NOTE 1: ALL PARAMETERS ARE MEASURED AT 5.0 VOLT EXCITATION, FOR THE NOMINAL FULL SCALE PRESSURE AND ROOM TEMPERATURE UNLESS OTHERWISE SPECIFIED. PRESSURE MEASUREMENTS ARE WITH POSITIVE PRESSURE APPLIED TO THE B-PORT.
- NOTE 2: SHIFT IS RELATIVE TO 25°C.
- NOTE 3: MEASURED AT ONE-HALF FULL SCALE RATED PRESSURE USING BEST STRAIGHT LINE CURVE FIT.

All Sensors reserves the right to make changes to any products herein. All Sensors does not assume any liability arising out of the application or use of any product or circuit described herein, neither does it convey any license under its patent rights nor the rights of others.

ALL SENSORS
 www.allensors.com
 16035 Vineyard Blvd. Morgan Hill, CA 95037 P 408 225 4314 F 408 225 2079 E www.allensors.com

www.allensors.com® Signed Original On File