

IPVB 8 Series  
Transistor Outline (TO-8)  
mV Output, Vertical Barb  
Current Supply



### DESCRIPTION

Advanced Sensor IPVB 8000 Series incorporates a rugged silicon MEMS pressure sensor that is designed to measure gauge or absolute pressures in a rugged TO package with integrated vertical barb port. The sensor allows for simple pressure connection to plastic hosing with 3/32" ID tubing. The MEMS pressure sensor offers a linear mV output with high over range capabilities. The sensor is ideal for many pressure applications where non ionic and non corrosives gases are measured.

### APPLICATIONS

- Pneumatic controls
- Automotive diagnostics
- Medical equipment/instrumentation
- Air Speed and Altitude
- Environmental controls
- Barometric pressure measurement
- Factory Automation
- Process Controls

### FEATURES

- 1% Field Interchangeability
- Constant Voltage
- Wide selection of port
- Absolute, Differential or Gage pressures
- Temperature Compensated
- 0.1% Pressure Non Linearity

### SPECIFICATIONS

	Symbol	Min	Typical	Max	Unit	Note
<b>Performance Characteristic</b>						
Supply Voltage		0.5	1.5	2.0	mA	
Bridge Resistance, Input & Output		2500		6100	Ω	
Zero Pressure Offset		-2.0	±0.1	+2.0	mV	
Pressure Non Linearity		-0.1		+0.1	PSI	2
Hysteresis & Repeatability			0.05		%FSS	
Full Scale Span	FSS	75		150	mV	3
Temperature Hysteresis, Offset & Span		-0.20		+0.20	%FSS	4
Thermal Error of Span		-0.5		+0.5	%FSS	
Thermal Error of Offset		-0.5		+0.5	%FSS	
Response Time			100		μS	
Insulation Resistance		50			M Ω	
Long Term Stability, Offset & Span			±0.4		%FSS	5
Weight				0.3	grams	
Compensated Temperature			0 to 50		°C	
Operating Temperatures			-40 to 125		°C	

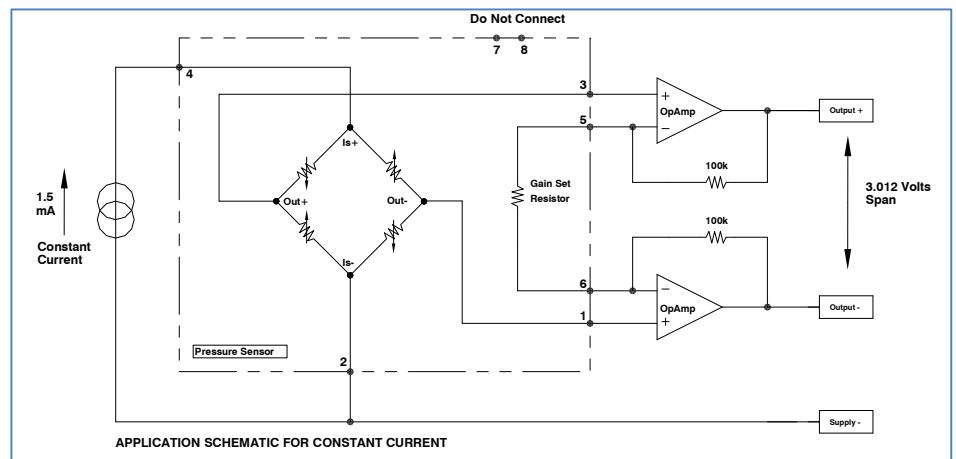
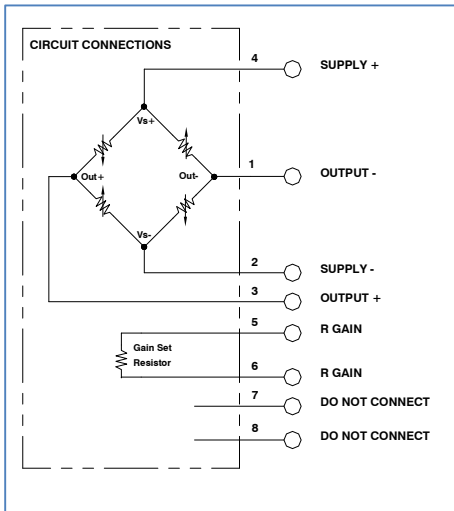
SPECIFICATIONS	Symbol	Min	Typical	Max	Unit	Note
<b>Absolute Maximum Conditions</b>						6
Supply Voltage				3	mA	
Storage Temperature		-50		150	°C	
Overage Pressure						
Burst, Differential Pressure				3x	Range	
Burst , Gauge & Absolute Pressure				10x	Range	
Media Compatibility		CDA, Non Ionic, Non Corrosive Gases				
Wetted Materials		Ceramic, Epoxy, RTV, Silicon, Gold, Aluminum, Palladium Silver				

**Reference Conditions:** Vsupply: 1.500mA, Ta=25°C.

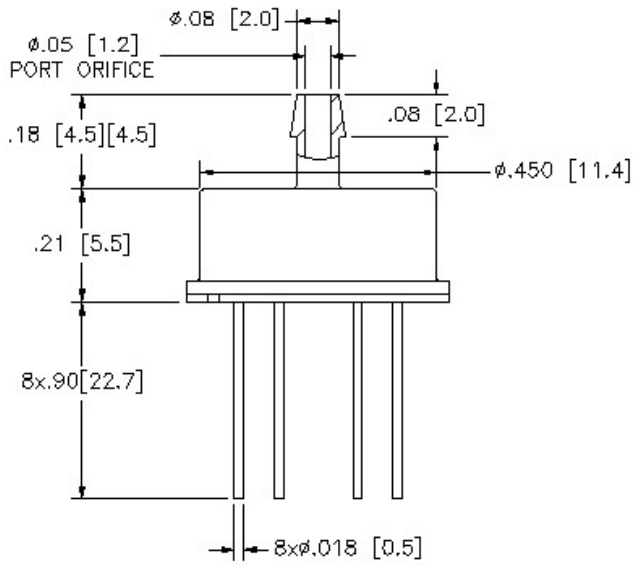
1. All specification at reference conditions unless otherwise noted. Output is ratio metric to supply voltage.
2. ½ Terminal Base Non Linearity (Measured at 0, 50% and 100% FS).
3. Full Scale Span output with sensor only. Field Interchangeability of 1% is guaranteed with use of Application Note.
4. Deviation between 50°C and 0°C expressed as percentage of reading at 25°C.
5. Deviation after 1 year period measured at reference conditions.
6. Exceeding Absolute Maximum Specification may damage the device. Extended exposure beyond the operating conditions may affect device reliability.

### EQUIVALENT CIRCUIT

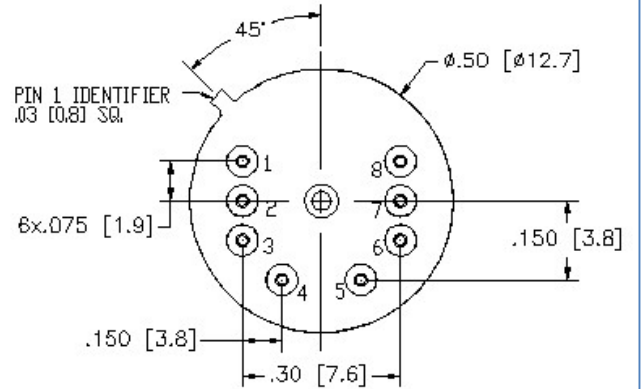
### APPLICATION CIRCUIT



### MECHANICAL DIMENSIONS in [mm]



SIDE VIEW



BOTTOM VIEW

PIN NMBR	FUNCTION
8	+OUT
3	-OUT
1	+IN,+VS
6,2	-IN,-VS
4,5,7	NC

ELECTRICAL PINOUT

**PART NUMBERING FOR ORDERS**

Series	Port Style	Pressure Range	Units	Type	Options
IPVB-8	VBP= Vertical Barb Port	005 015 030 050 100 **	P=PSI	A=Absolute G=Gauge	-C = Gel Coat  -PC= Pin Cut

**Part Number Example: IPVB 8-VBP 030PG-C 0-30 PSI, Gauge Sensor, Gel Coating**

**WARRANTY**

Pressure sensors have a limited one-year warranty to the original purchaser. AVSensors will repair or replace, at its option, without charge those items it finds defective. This is the buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall AVSensors be liable for consequential, special, or indirect damages. This warranty does not apply to units that have been modified, misused, neglected or installed where the application exceeds published ratings. Specifications may change without notice. The information supplied is believed to be accurate and reliable as of this printing, however, we assume no responsibility for its use.