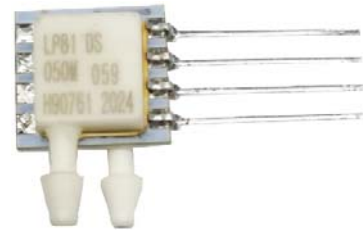


SA82 Series
Dual In Line Package
mV Output, Temperature Compensated
Voltage Supply



DESCRIPTION

Sensorall International SA82 Series is a temperature compensated, mV output, ceramic mounted pressure sensor packaged in a rugged Dual In Line package. SA82 uses a silicon MEMS pressure sensor bonded to a ceramic substrate containing thick film resistors that are uniquely laser trimmed for each sensor.

Incorporating a flexible design, the SA82 Series is available with side port, top ports or manifold mounted ports and can be mounted with SMT pin, Dual in line pin or in line pin to allow OEMs to optimize their board design. The SA82 series is powered using constant voltage, the tight span control will ensure sensor field interchangeability.

The SA82 series superior die performance, coupled with rugged ceramic substrate ensures long term stability with superior temperature performance over wide operating range.

APPLICATIONS

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

FEATURES

- 100% Field Interchangeability
- Constant Voltage
- Wide selection of port
- Absolute, Differential or Gage pressures
- Temperature Compensated
- 0.5% Pressure Non Linearity

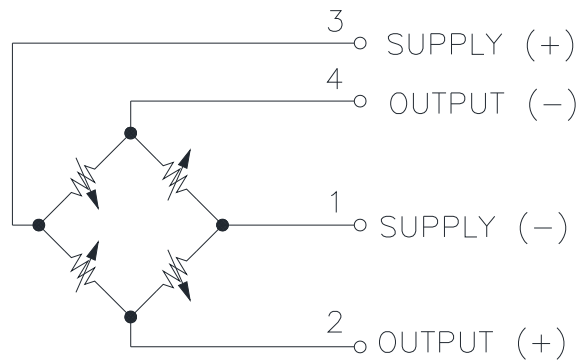
SPECIFICATIONS	Symbol	Min	Typical	Max	Unit	Note
Performance Characteristics						
Supply Voltage		>0	10	16	VDC	
Bridge Resistance, Input & Output		1500		12000	Ω	
Zero Pressure Offset		-1.5	± 0.5	+1.5	mV	
Pressure Non Linearity		-0.5		+0.5	%FSS	2
Hysteresis & Repeatability			0.05		%FSS	
Full Scale Span	FSS	79	80	81	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		μ S	
Insulation Resistance		50			M Ω	
Long Term Stability, Offset & Span			± 0.4		%FSS	5
Weight				3	grams	
Compensated Temperature			0 to 50		$^{\circ}$ C	
Operating Temperatures			-40 to 125		$^{\circ}$ C	

SPECIFICATIONS	Symbol	Min	Typical	Max	Unit	Note
Absolute Maximum Conditions						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				

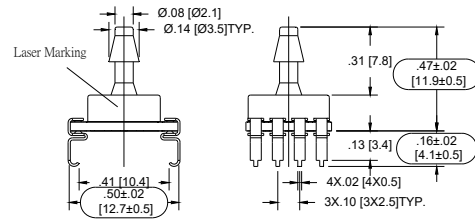
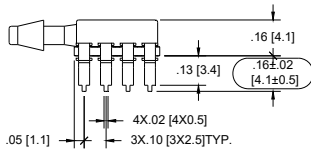
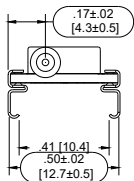
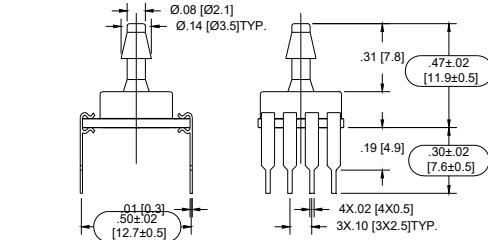
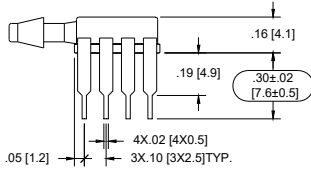
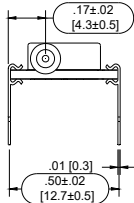
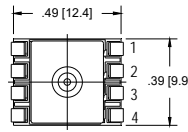
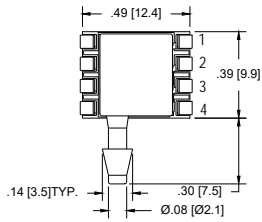
Reference Conditions: Vsupply: 10VDC, Ta=25°C.

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),0.75% for pressure range less than 5Kpa.
3. Full Scale Span output with sensor only. Span is 50mV for products less than 5Kpa pressure range.
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

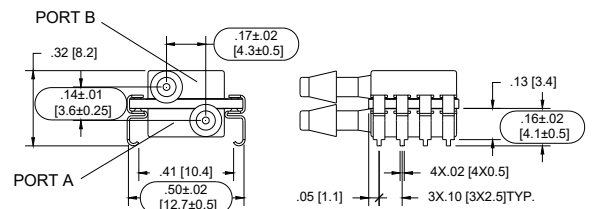
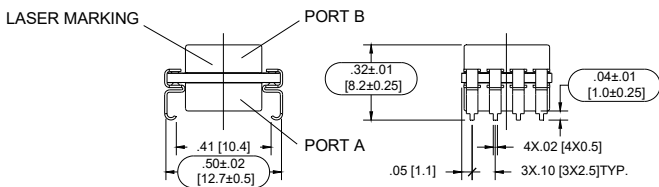
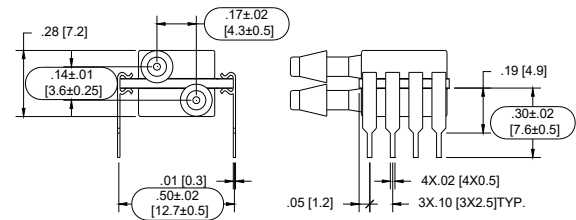
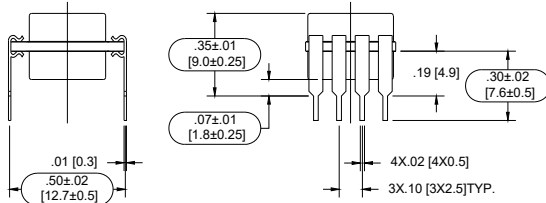
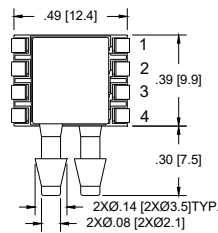
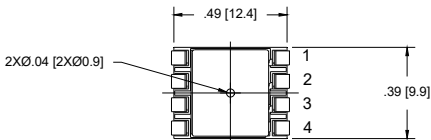


MECHANICAL DIMENSIONS in [mm]



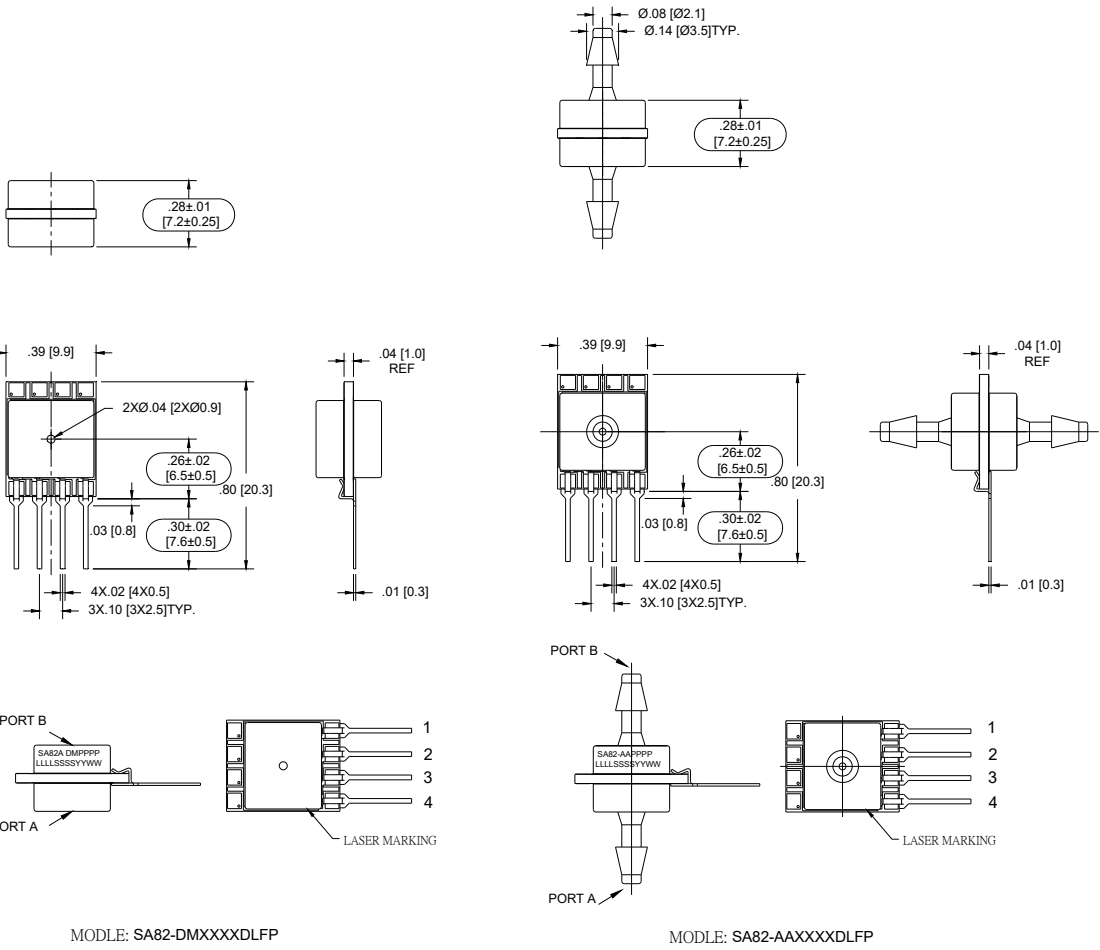
MODLE: SA82 -SSPPPPXP/SGP

MODLE : SA82-TPPPPXP/SGP



MODLE: SA82-DMPPPPXSFP

MODLE: SA82-DSPPPPXPFP

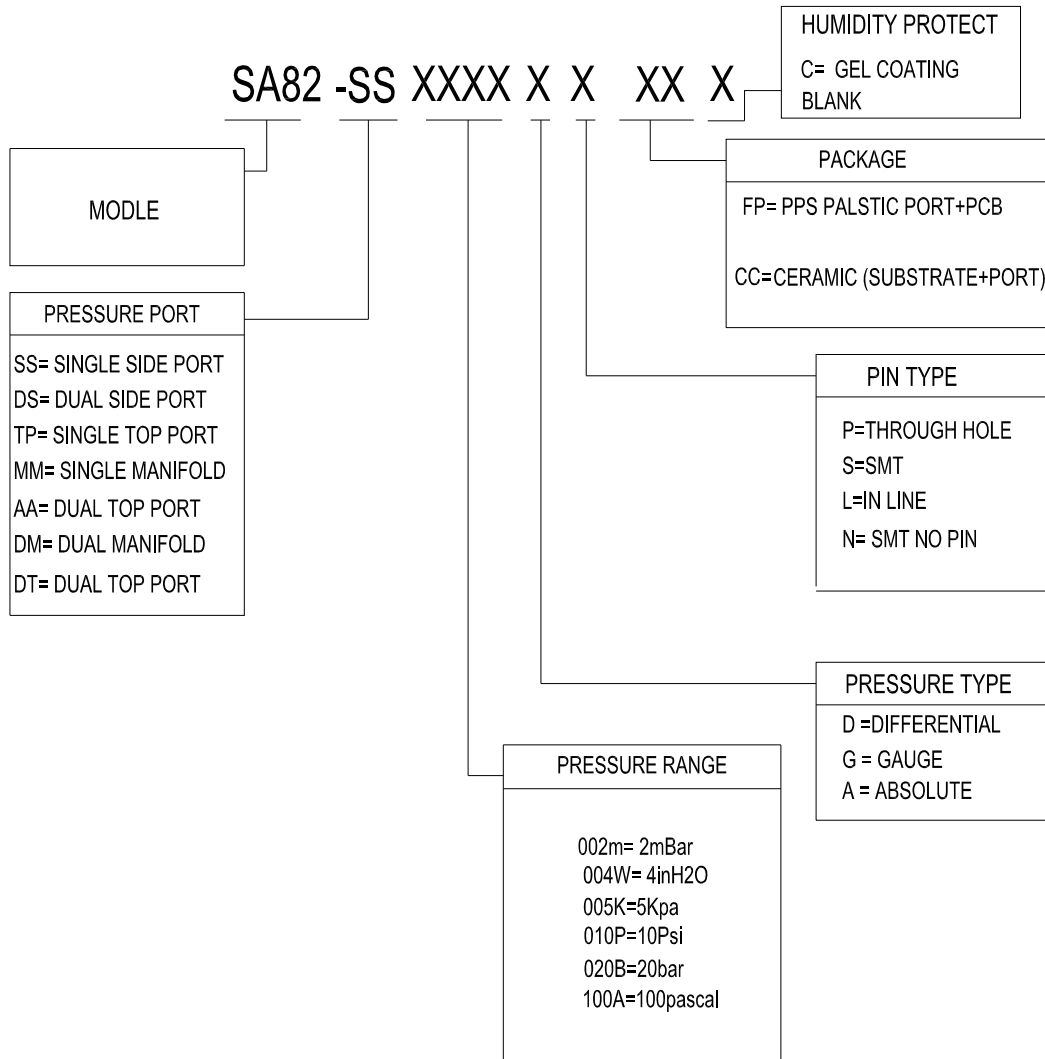


NOTES:

1: Unless specified, Port A is default as positive pressure output.

PART NUMBERING FOR ORDERS

ORDERING INFO



WARRANTY

Pressure sensors have a limited one-year warranty to the original purchaser. Sensorall International 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 Sensorall International 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.