

Solid State Pressure Sensor

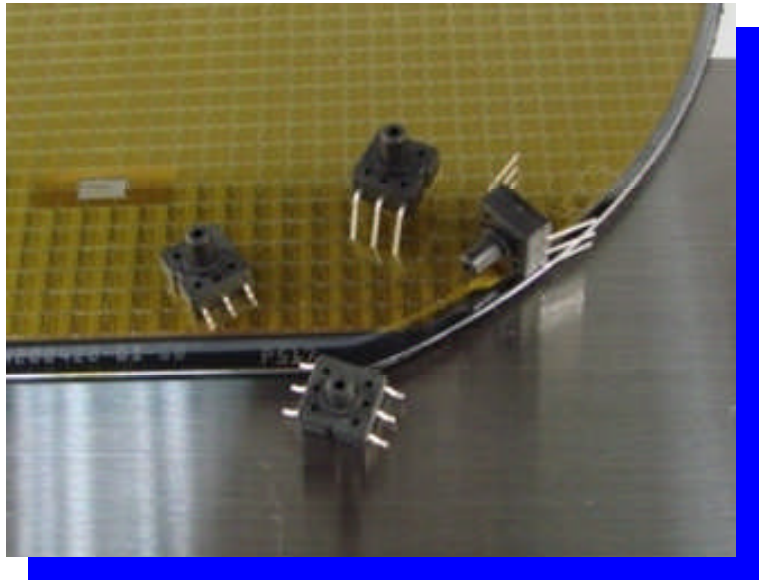
SIP Series – Model 32

FEATURES

- Low Cost
- Miniature DIP
- Gage Pressure
- Small Foot Print
- Improved Linearity

APPLICATIONS

- Medical Equipment
- White Goods
- Industrial P/I
- Process Control



DESCRIPTION

The Model 32 SIP Series are uncompensated hi-performance pressure die in 6-pin plastic DIP package. It provides a highly linear output when pressure is applied to the molded pressure port.

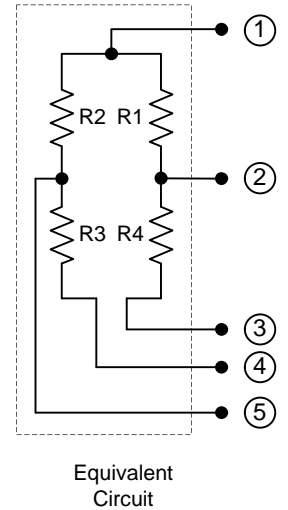
The sensor is optimized for use in the high volume applications, such as portable blood pressure monitors, electronically controlled air mattresses and a wide variety of pneumatic applications requiring a low cost sensor. A pressure port is provided for simple, convenient connection.

To furnish maximum flexibility, the sensor can be offered with custom features to obtain a direct replacement for existing applications. Please contact the factory for details.

Characteristics 5 psig Version

Unless otherwise specified, all parameters are measured at 25 °C and excitation of 5.0 Volts

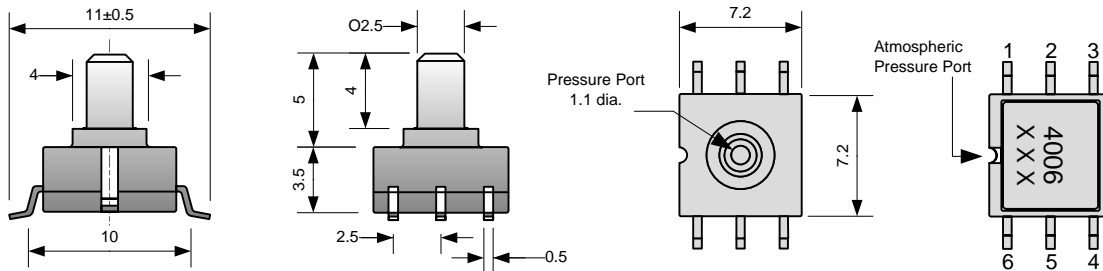
Parameters	Min	Typ	Max	Unit
Excitation Voltage	0	5	10	V
Pressure Range		5		psi
Offset	-30	0	+30	mV
Span	40	60	80	mV
Bridge Impedance	4	5	6	kohm
Linearity ^{NOTE1}		±0.3		%FS
TC - Span ^{NOTE2}		-22±5		%FS/100°C
TC - Offset ^{NOTE2}		±7		%FS/100°C
TC - Resistance ^{NOTE2}		28±5		%FS/100°C
Temp - Operating	-20		+85	°C
Temp - Storage	-40		+125	°C
Over Pressure			3X	Rated FS



Notes:

1. Best Fit Straight Line
2. Temperature coefficient is measured from 0 °C to 50 °C
3. Wetted material contains RTV, PPA, glass and silicon

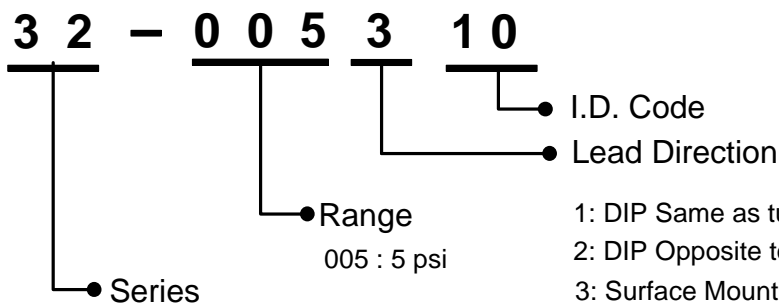
Dimension



Note:
Soldering of lead pins: 250 °C for 5 sec max.

Unit: mm

Ordering Information



Lead	Connection
3,4	INPUT -
1	INPUT +
2	OUTPUT +
5	OUTPUT -

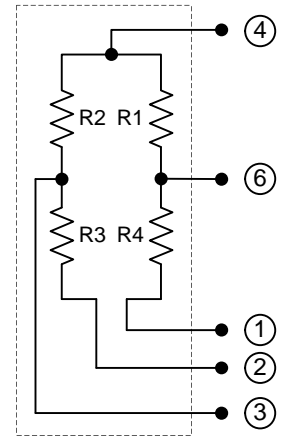


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Characteristics 15 psig Version

Unless otherwise specified, all parameters are measured at 25 °C and excitation of 5.0 Volts

Parameters	Min	Typ	Max	Unit
Excitation Voltage	0	5	10	V
Pressure Range		15		psi
Offset	-50	0	+50	mV
Span	115	145	175	mV
Bridge Impedance	2.7	3.3	4.0	kohm
Linearity ^{NOTE1}		±0.1		%FS
TC - Span ^{NOTE2}		-22±5		%FS/100°C
TC - Offset ^{NOTE2}		±7		%FS/100°C
TC - Resistance ^{NOTE2}		28±5		%FS/100°C
Temp - Operating	-20		+85	°C
Temp - Storage	-40		+125	°C
Over Pressure			3X	Rated FS

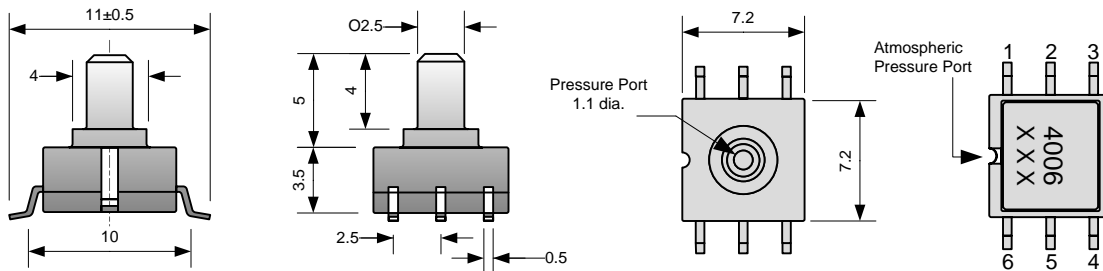


Equivalent Circuit

Notes:

1. Best Fit Straight Line
2. Temperature coefficient is measured from 0 °C to 50 °C
3. Wetted material contains RTV, PPA, glass and silicon

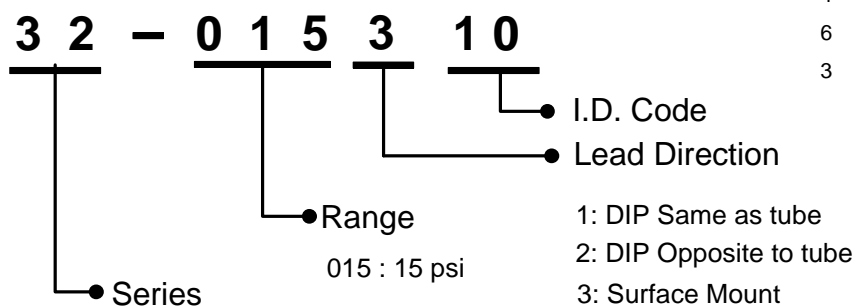
Dimension



Note:
Soldering of lead pins: 250 °C for 5 sec max.

Unit: mm

Ordering Information



Lead	Connection
1,2	INPUT -
4	INPUT +
6	OUTPUT +
3	OUTPUT -

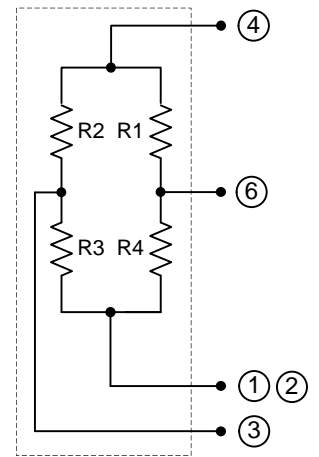


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Characteristics 100 psig Version

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Parameters	Min	Typ	Max	Unit
Excitation Voltage	0	5	10	V
Pressure Range		100		psi
Offset	-35	0	+35	mV
Span	70	100	130	mV
Bridge Impedance	4	5	6	kohm
Linearity ^{NOTE1}		±0.3		%FS
TC - Span ^{NOTE2}		-22±5		%FS/100°C
TC - Offset ^{NOTE2}		±7		%FS/100°C
TC - Resistance ^{NOTE2}		28±5		%FS/100°C
Temp - Operating	-20		+85	°C
Temp - Storage	-40		+125	°C
Over Pressure			1.5x	Rated FS

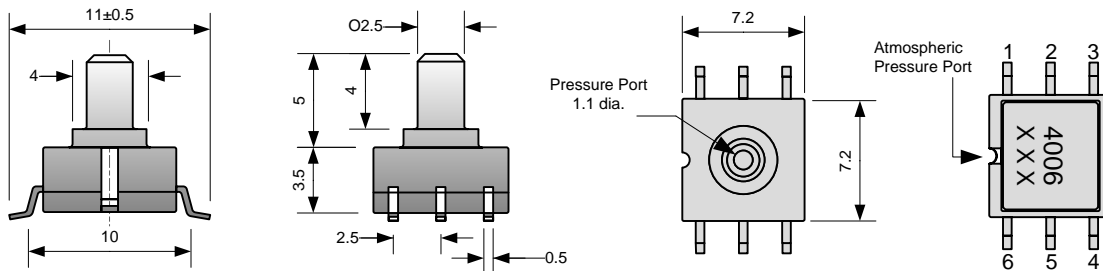


Equivalent Circuit

Notes:

1. Best Fit Straight Line
2. Temperature coefficient is measured from 0 °C to 50 °C
3. Wetted material contains RTV, PPA, glass and silicon

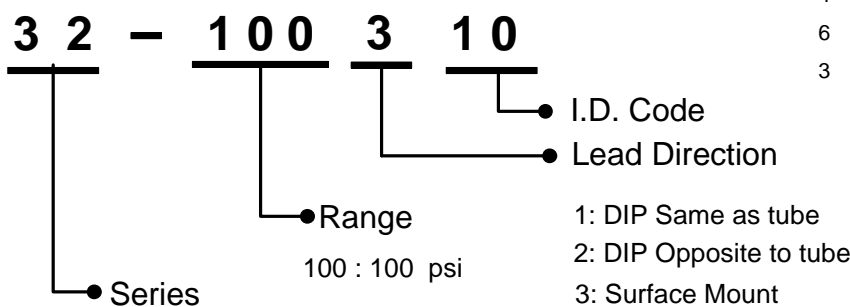
Dimension



Note:
Soldering of lead pins: 250 °C for 5 sec max.

Unit: mm

Ordering Information



Lead	Connection
1,2	INPUT -
4	INPUT +
6	OUTPUT +
3	OUTPUT -



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