



US9011 Silicon Pressure Sensor

Features

- ◆ Low Cost
- ◆ SMT Package
- ◆ Constant Current or Constant Voltage Drive
- ◆ Close Bridge or Open Bridge
- ◆ High Output
- ◆ Wide Pressure Range Available from 60psi to 1200psi

Applications

- ◆ Medical Instrumentation
- ◆ Altimeter
- ◆ Weather Forecast
- ◆ Tire Gauge
- ◆ Pressure Gauge
- ◆ Industrial Sensor
- ◆ Home Appliances



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Specification

Type of package	SMT package
Pressure medium	Air or non-corrosive gas

	Min	Nominal	Max	Unit
Excitation Voltage	--	5	10	V
Excitation Current	--	1.00	2.00	mA
Bridge Impedance	4	5	6	kΩ
Span ¹				
60 psi	75	100	125	mV
100 psi	75	100	125	mV
300 psi	120	150	180	mV
800 psi	170	200	230	mV
1200 psi	260	300	340	mV
Offset	-30	±10	+30	mV
TC Span ²	-0.17	-0.22	-0.27	%FS/°C
TC Offset ²	-0.08	-0.02	+0.08	%FS/°C
Linearity ³	-0.3	±0.05	+0.3	%FS
Hysteresis	-0.3	±0.1	+0.3	%FS
Proof Pressure			2X	Rated FS
Burst Pressure ⁴			3X	Rated FS
Operating Temperature	-40		125	°C
Storage Temperature	-55		150	°C

¹ Unless otherwise specified, span is measured at 5.0V Constant Voltage supply at 25°C.

² Measured from 0°C to 50°C @ 5V Constant voltage excitation.

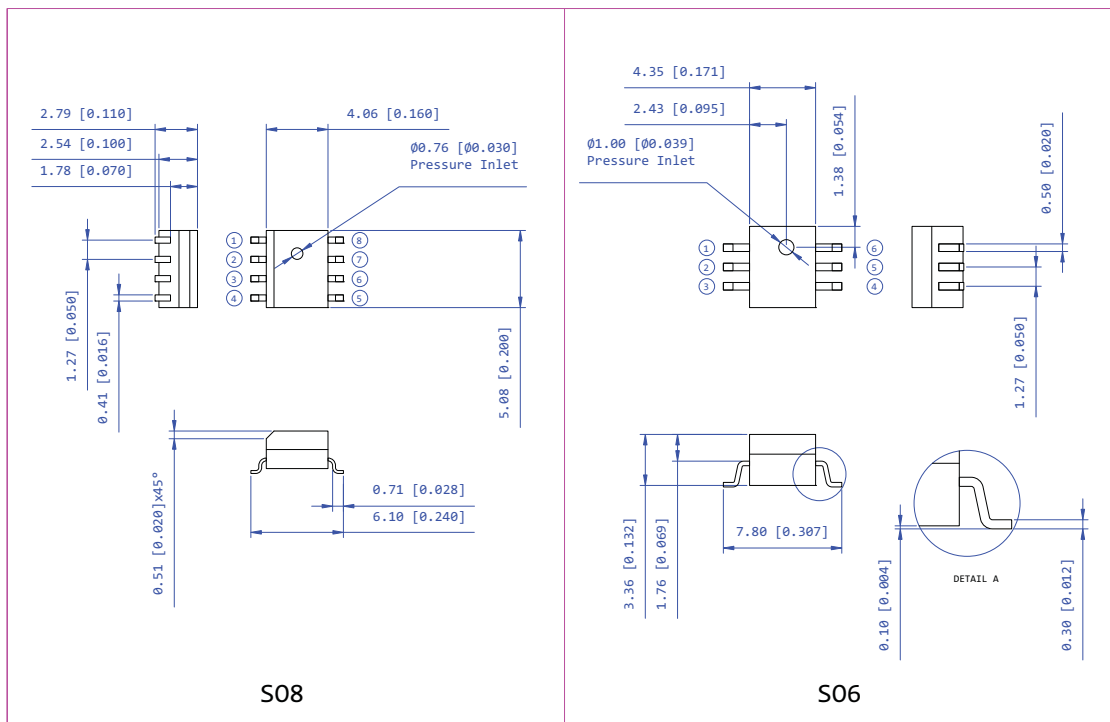
³ Defined as best straight line.

⁴ Maximum burst pressure up to 500psi for high pressure type (300psi)



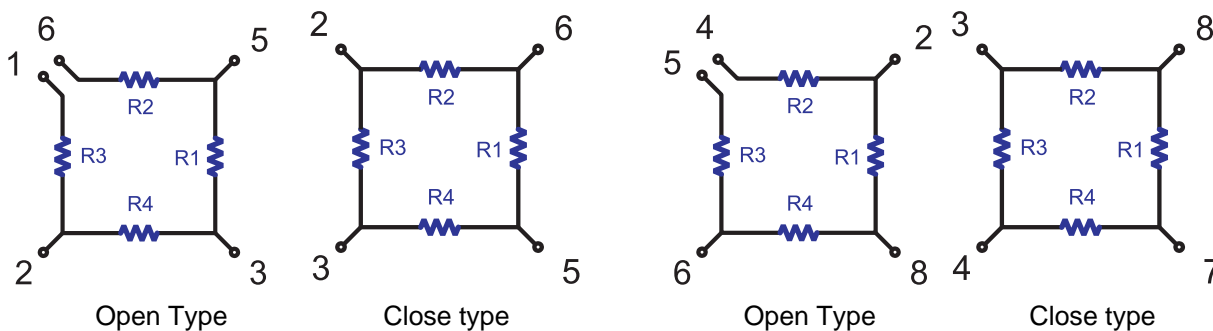
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Pads Layout and Definition



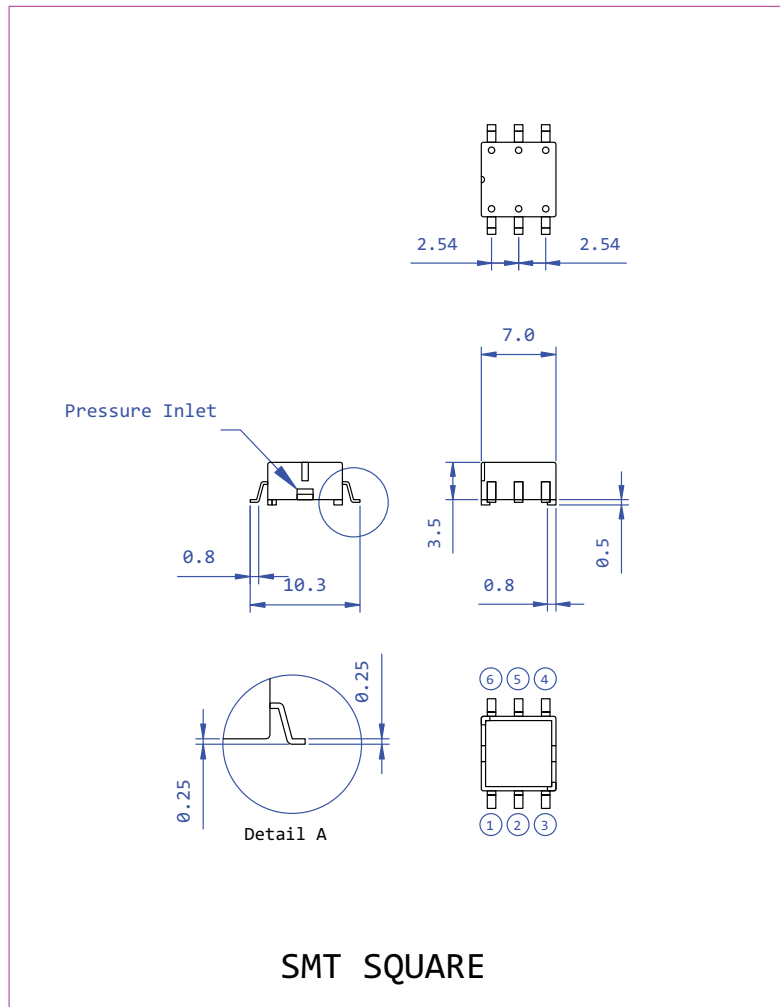
Unit: mm[in]

SO6		Pin	SO8	
Open Type	Close Type		Open Type	Close Type
Gnd	N/C	1	N/C	N/C
S-	Gnd	2	S+	N/C
Ext	S-	3	N/C	Gnd
N/C	N/C	4	Gnd	S-
S+	Ext	5	Gnd	N/C
Gnd	S+	6	S-	N/C
		7	N/C	Ext
		8	Ext	S+

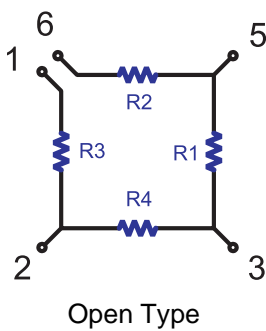




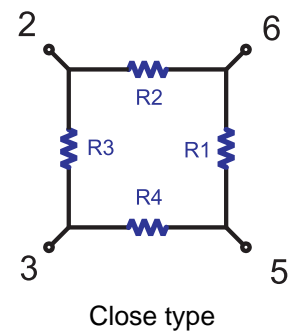
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Unit: mm



SMT	Pin	SMT
Open Type		Close Type
Gnd	1	N/C
S-	2	Gnd
Ext	3	S-
N/C	4	N/C
S+	5	Ext
Gnd	6	S+

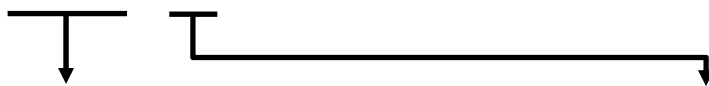




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Ordering Information

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060	60 psi, Open bridge
100	100 psi, Open bridge
300	300 psi, Open bridge
800	800 psi, Open bridge
K20	1200 psi, Open bridge
06C	60 psi, Close bridge
10C	100 psi, Close bridge
30C	300 psi, Close bridge
80C	800 psi, Close bridge
K2C	1200 psi, Close bridge

R	SMT
6	SO6
8	SO8