

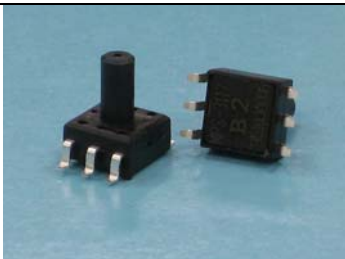
## MPS-3110 series Pressure Sensor

### ■ Features

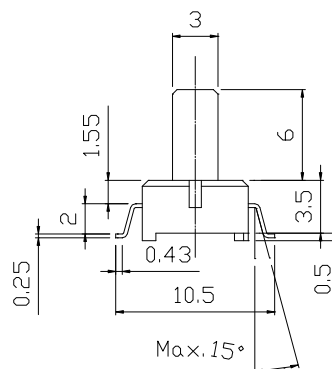
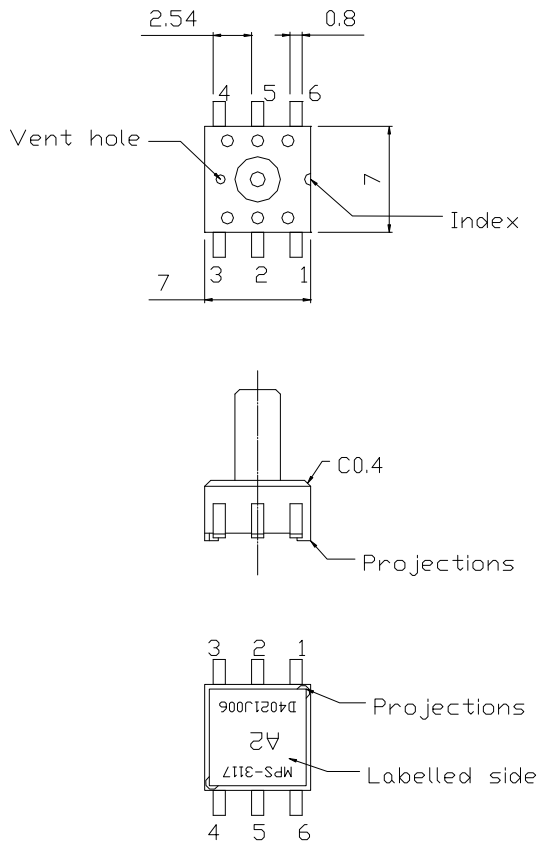
- Competitive price SMD package
- Wide operating temperature range:- 40 to +85°C
- Solid-state reliability
- Easy to Use
- Easily Embedded in OEM Equipment
- Gauge pressure type ( 1 、 5.8 、 15 、 30 、 100 PSI )

### ■ Applications

- Digital blood pressure meter
- Digital pressure gauges
- Environmental monitoring
- Consumer & sports
- Medical instrumentation & monitoring
- Disposable blood pressure sensor

Pressure type	Gauge
	MPS-3110 series
Model	

### ■ Outline dimensions

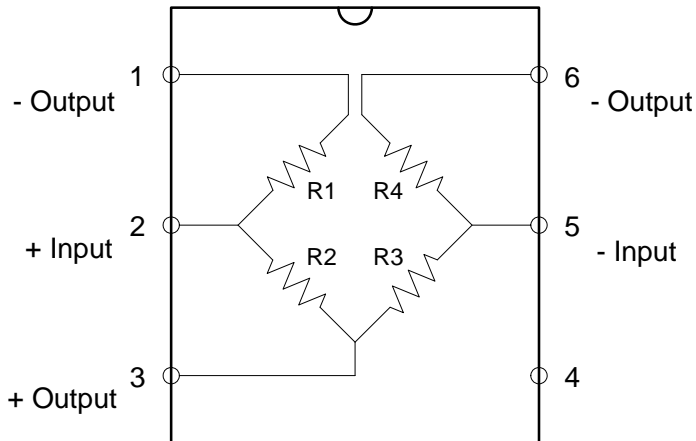


Unit: mm

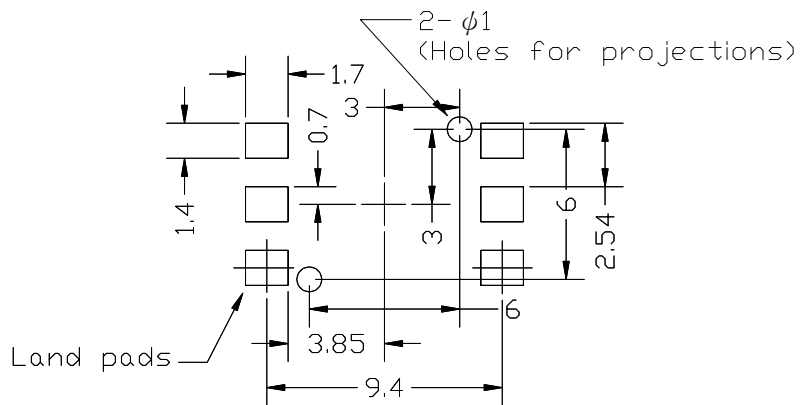
## ■ Specifications

Parameter	Min	Typ	Max	Units	Notes
<b>General</b>					
Pressure Range	1 · 5.8 · 15 · 30 · 100			PSIG	40 KPaG
Maximum Overpressure			2X		Rated pressure
Operating Temperature Range	-40		85	°C	-40°F ~+185°F
Storage Temperature Range	-40		125	°C	-40°F ~+257°F
Operating humidity	15		85	% RH	No condensation
Media Compatibility	Clean, dry air & noncorrosive gases				
<b>Electrical performance<sup>(1)</sup></b>					
Excitation voltage	2	5	15	Vdc	
Excitation current 3.3kOhm (MPS-3113) 5kOhm (MPS-3117 · MPS-3118)	0.6 0.4	1.5 1	4.5 3	mA	(5)
Bridge resistance 3.3kOhm (MPS-3113) 5kOhm (MPS-3117 · MPS-3118)	2.7 4	3.3 5	3.9 6	kΩ	
Offset Voltage	-25		25	mV	
Full Scale Span Voltage 1 PSI (MPS-3117) 5.8 PSI (MPS-3117) 5.8 PSI (MPS-3113 · MPS-3118) 15 PSI (MPS-3117) 15 PSI (MPS-3113 · MPS-3118) 30 PSI (MPS-3118) 100 PSI (MPS-3118)	20 50 20 130 70 80 70	30 75 45 170 100 110 120	40 100 70 210 130 140 170	mV	
Linearity 1 PSI 5.8, 15, 30, 100 PSI	-0.7 -0.3	0.15 0.05	0.7 0.3	% Span	(2)
Temperature Coefficient of Zero Offset 1 PSI 5.8, 15, 30, 100 PSI	-0.22 -0.08		0.22 0.08	% Span/°C	(3)
Temperature Coefficient of Span	-0.16	-0.21 <sup>(4)</sup>	-0.26	%Span/°C	Const. Voltage excitation (3)
	-0.05	0.025 <sup>(5)</sup>	0.05		Const. Current excitation (3)
Temperature Coefficient of Resistance	0.17	0.2	0.23	%/°C	(3)
Notes :					
1. Unless otherwise specified, measurements were taken with a supply voltage of 5 Vdc at a temperature of 25±3°C and humidity ranging from 25% ~85% .					
2. Best fit straight line.					
3. Between 0°C and 50°C. Temperature coefficients are typical values.					
4. Measured only with constant voltage excitation ( 5V ) .					
5. Measured only with constant current excitation ( 1mA for 5kOhm sensor ; 1.5mA for 3.3kOhm sensor ) .					
Metrodyne Microsystem Corp. reserves the right to make changes to the product specification in this publication.					

■ Terminal connection diagram



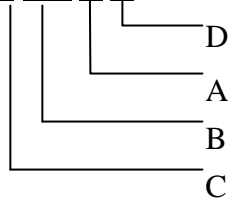
■ Recommended footprint



Unit:mm

■ **Ordering information**

MPS-3 1 1 7-006 G A



A	Pressure type	B	Pressure range
G	Gauge	001	1 PSI
		006	5.8 PSI
		015	15 PSI
		030	30 PSI
		100	100 PSI
C		D	
3	3.3kOhm	C	Plastic cover
7	High sensitivity		
8	Low sensitivity		

Part No.	Pressure type	Pressure range	Feature	Note
MPS-3117-001GC	Gauge	1 PSI	5kOhm	Plastic cover
MPS-3113-006GC	Gauge	5.8 PSI	3.3kOhm	Plastic cover
MPS-3117-006GC	Gauge	5.8 PSI	5kOhm	High sensitivity
MPS-3118-006GC	Gauge	5.8 PSI	5kOhm	Plastic cover
MPS-3113-015GC	Gauge	15 PSI	3.3kOhm	Plastic cover
MPS-3117-015GC	Gauge	15 PSI	5kOhm	High sensitivity
MPS-3118-015GC	Gauge	15 PSI	5kOhm	Plastic cover
MPS-3118-030GC	Gauge	30 PSI	5kOhm	Plastic cover
MPS-3118-100GC	Gauge	100 PSI	5kOhm	Plastic cover

**Metrodyne Microsystem Corp.**

10, Prosperity Rd. II, Science-Based Industrial Park, Hsin-Chu 300, Taiwan, R.O.C.

Tel:886-3-5632161 Fax:886-3-5632509

E-mail:sales@metrodyne.com.tw <http://www.metrodyne.com.tw>