

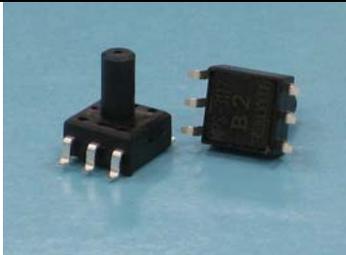
## MPS-3119 series Pressure Sensor

### ■ Features

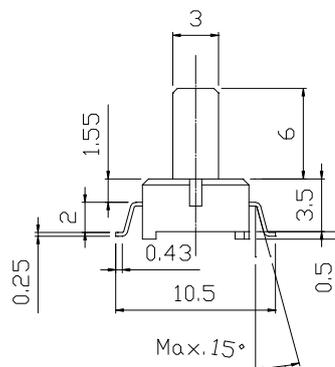
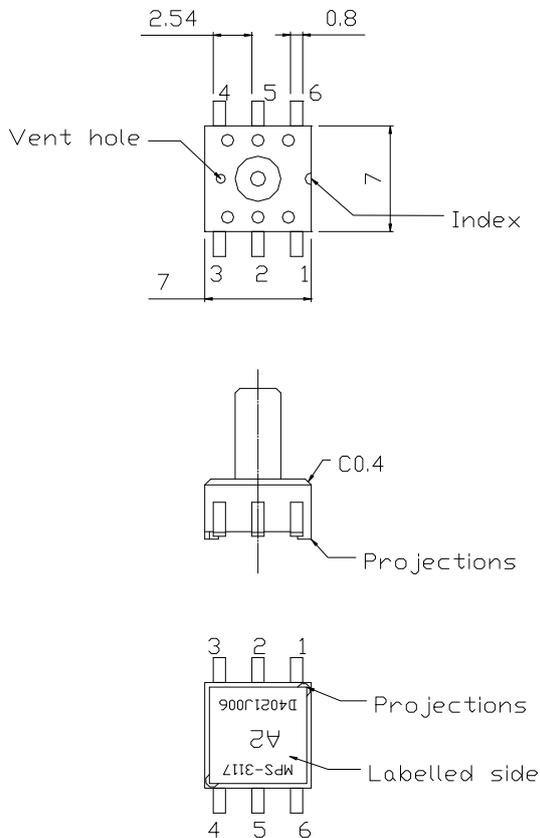
- Competitive price SMD package
- Wide operating temperature range:- 40 to +85°C
- Solid-state reliability
- Easy to Use
- Easily Embedded in OEM Equipment
- Gauge pressure type ( 5.8 PSI )

### ■ Applications

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

| Pressure type | Gauge   |
|---------------|---|
|               | MPS-3119 series   |
| Model         |  |

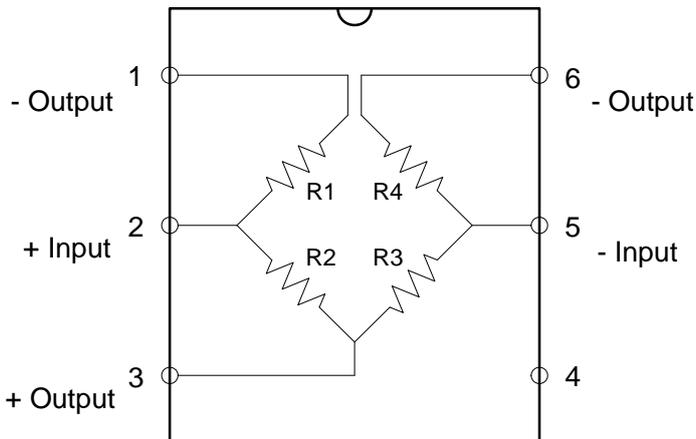
### ■ Outline dimensions



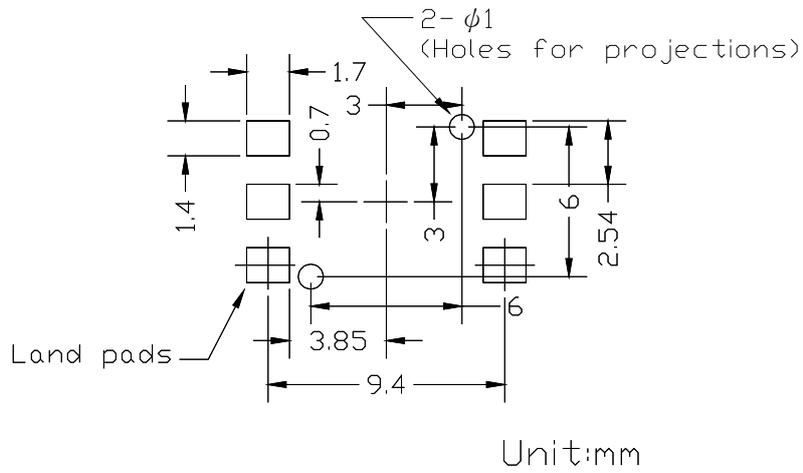
## ■ Specifications

| Parameter   | Min                                 | Typ                  | Max       | Units     | Notes                         |
|---|-------------------------------------|----------------------|-----------|-----------|-------------------------------|
| <b>General</b>  |                                     |                      |           |           |                               |
| Pressure Range  | 5.8                                 |                      |           | 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  | 0.4                                 | 1                    | 3         | mA        | (5)                           |
| Bridge resistance   | 4.5                                 | 5                    | 5.5       | kΩ        |                               |
| <b>Offset Voltage</b>   | <b>-15</b>                          |                      | <b>15</b> | <b>mV</b> |                               |
| Full Scale Span Voltage   | 60                                  | 67.5                 | 75        | mV        |                               |
| Linearity   | -0.3                                | 0.05                 | 0.3       | % Span    | (2)                           |
| Temperature Coefficient of Zero Offset  | -0.08                               |                      | 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.  |                                     |                      |           |           |                               |
| Metrodyne Microsystem Corp. reserves the right to make changes to the product specification in this publication.                                      |                                     |                      |           |           |                               |

## ■ Terminal connection diagram



## ■ Recommended footprint



## ■ Ordering information

| Part No.       | Pressure type | Pressure range | Feature | Note |
|----------------|---------------|----------------|---------|------|
| MPS-3119-006GC | Gauge         | 5.8 PSI        | 5kOhm   |      |
|                |               |                |         |      |

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