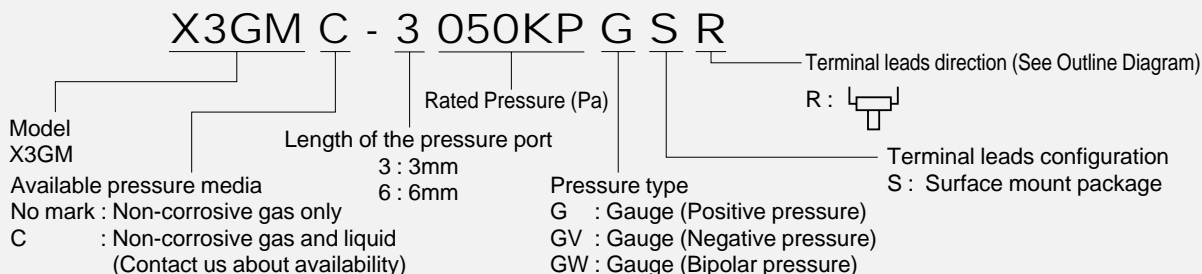
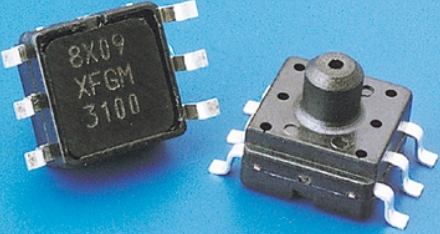
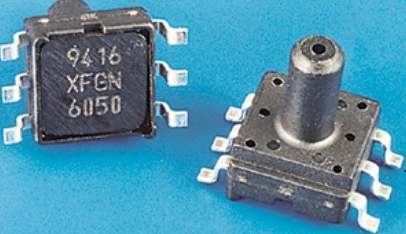


Features

- 3V excitation, Battery operation available
- Volt level output
- On-chip amplification and temperature compensations
- Pre-calibration of offset voltage and span
- Non-corrosive liquid measurable (X3GMC only)

Part number for ordering



| Pressure type | Gauge pressure | |
|-----------------------|--|--|
| | X3GM-3 | X3GM-6 |
| Model |  |  |
| Package configuration | Surface mount package, 3mm pressure port | Surface mount package, 6mm pressure port |

| Measurable pressure range (kPa) | Part number for ordering | |
|---------------------------------|--------------------------|-----------------|
| -100~100 | X3GM-3100KPGWSR | X3GM-6100KPGWSR |
| 0~-100 | X3GM-3100KPGVSR | X3GM-6100KPGVSR |
| 0~50 | X3GM-3050KPGSR | X3GM-6050KPGSR |
| 0~100 | X3GM-3100KPGSR | X3GM-6100KPGSR |
| 0~200 | X3GM-3200KPGSR | X3GM-6200KPGSR |
| 0~1000 | X3GM-3001MPGSR | X3GM-6001MPGSR |

Specifications

| Model/Rated pressure | 100KPGW | 100KPGV | 050KPG | 100KPG | 200KPG | 001MPG | Unit |
|--|---|---------|--------|--------|--------|----------------------------|--------------------|
| Recommended operating conditions | | | | | | | |
| Pressure type | Gauge pressure | | | | | | — |
| Rated pressure | ±100 | -100 | 50 | 100 | 200 | 1000 | kPa |
| | ±1.020 | -1.020 | 0.510 | 1.020 | 2.040 | 10.20 | kg/cm ² |
| Measurable pressure range | -100~100 | 0~-100 | 0~50 | 0~100 | 0~200 | 0~1000 | kPa |
| Pressure media ※1 | XFGM : Non-corrosive gas only, XFGMC : Non-corrosive gas and liquid | | | | | | — |
| Excitation voltage | 3.0±0.15 | | | | | | VDC |
| Absolute maximum rating | | | | | | | |
| Maximum load pressure | Twice of rated pressure | | | | | 1.5times of rated pressure | — |
| Maximum excitation voltage | 6 | | | | | | VDC |
| Operating temperature | -10~80 | | | | | | °C |
| Storage temperature | -20~100 | | | | | | °C |
| Operating humidity | 30~80 (No dew condensation) | | | | | | %RH |
| Electric performances/characteristics (Excitation voltage Vcc=3.0V constant, Ambient temperature Ta=25°C) | | | | | | | |
| Current consumption | less than 6 | | | | | | mA |
| Output impedance | less than 10 | | | | | | Ω |
| Source current | less than 0.1 | | | | | | mA |
| Sink current | less than 1 | | | | | | mA |
| Mechanical response time | 2 (For the reference) | | | | | | msec |
| Full scale span voltage | 1.5 | | | | | | V |
| Offset voltage※1.2 | 0.5±0.075 | | | | | | V |
| Full scale span voltage※1.2 | 2.0±0.075 | | | | | | V |
| Accuracy※1.2 | ±5.0 | | | | | | %FS/0~50°C |

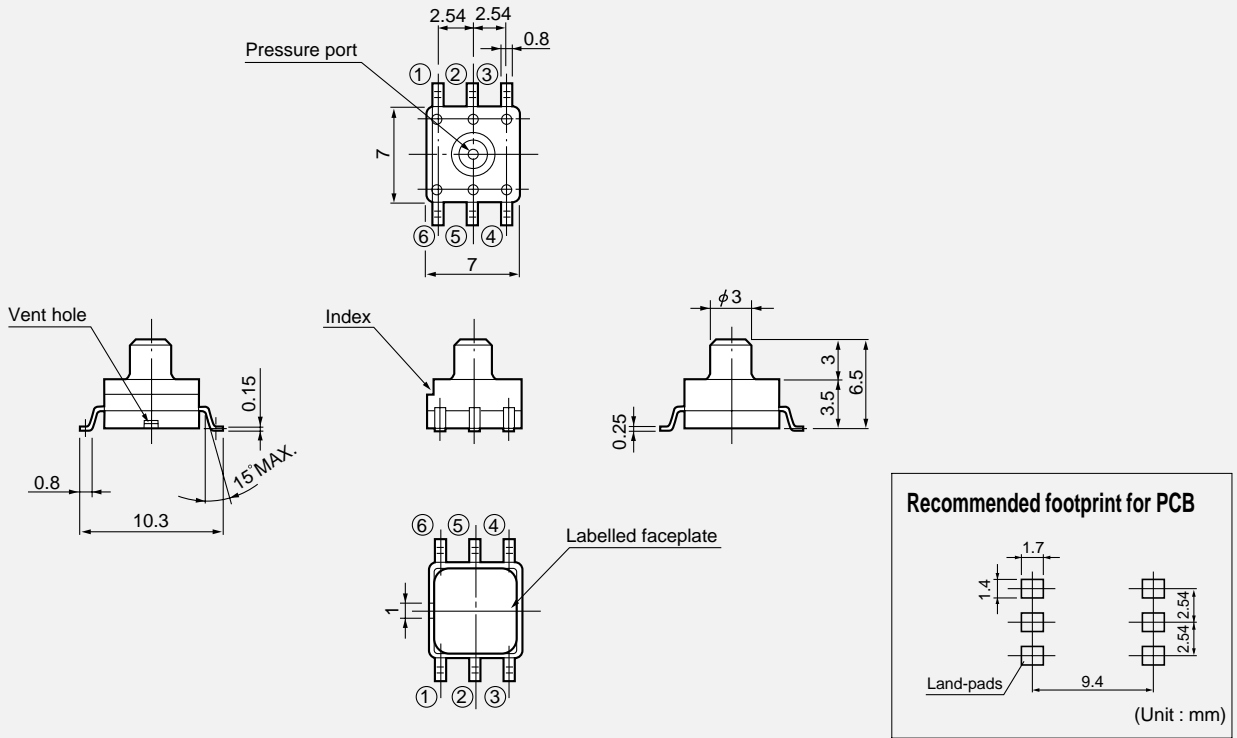
Note ; ※1) Please consult us available when you choose the C models.

※2) Excluding input voltage error.

■ Outline dimensions ■

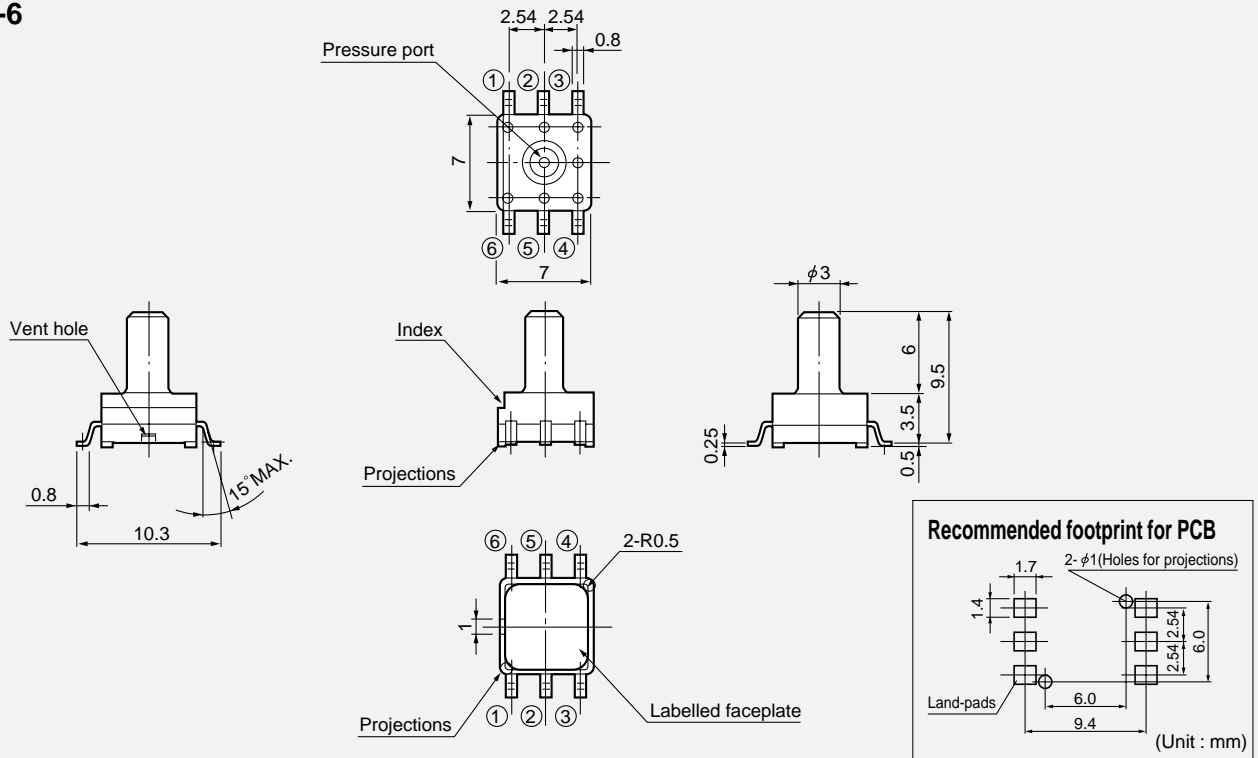
Unit : mm

X3GM-3

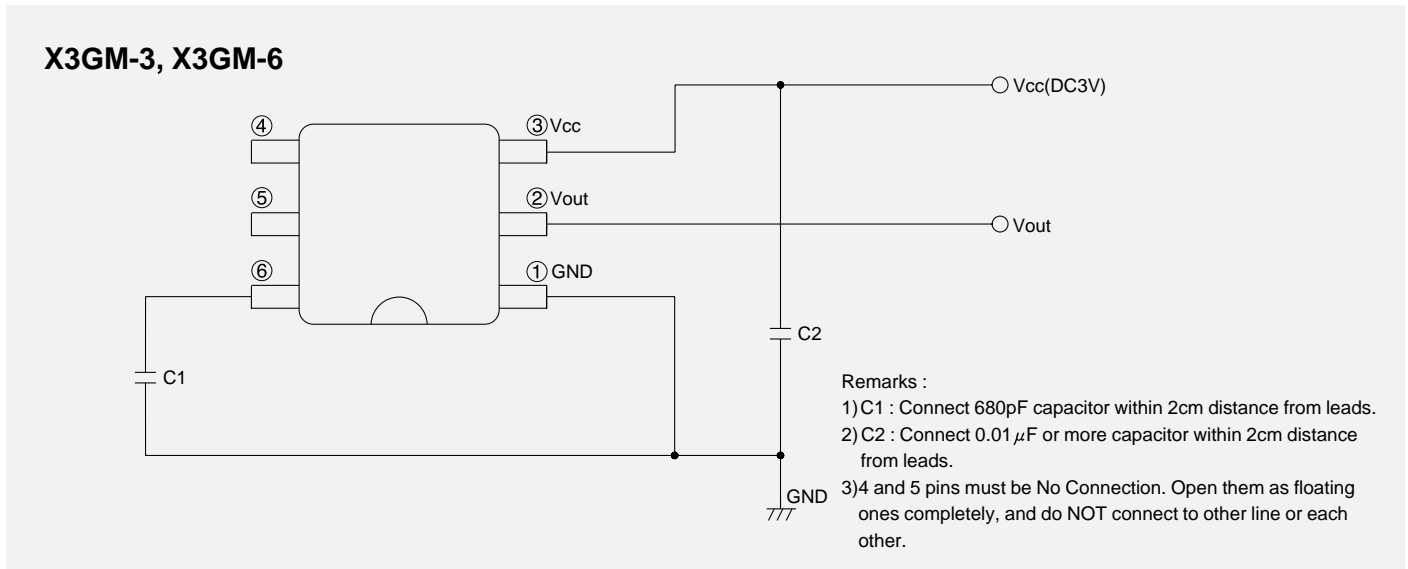


X3GM-6

Unit : mm



■ Connection diagram ■



■ Transfer Function ■

$$V_{out} = V_s \times (P \times \alpha + \beta) \pm (\text{Pressure Error} \times \text{Temperature Error Multiplier} \times \alpha \times V_s)$$

※ $V_s = 3.0$ volts

Notes ; The output voltage (Vout) is no perfect ratiometric with the power supply voltage.

※ P = Input Pressure (kPa)

| Model | pressure range | α | β | Pressure Error(kPa) |
|-------------|----------------|----------|---------|---------------------|
| 050KPG(D) | 0~50kPa | 0.01 | 0.1667 | 2.5 |
| 100KPG(D) | 0~100kPa | 0.005 | 0.1667 | 5.0 |
| 100KPGV | 0~-100kPa | -0.005 | 0.1667 | 5.0 |
| 100KPGW(DW) | -100~+100kPa | 0.0025 | 0.4167 | 10.0 |
| 200KPG(D) | 0~200kPa | 0.0025 | 0.1667 | 10.0 |
| 001MPG(D) | 0~1MPa | 0.0005 | 0.1667 | 50.0 |
| 115KPA | 15~115kPa.abs | 0.005 | 0.09167 | 5.0 |

※ Temperature Error Multiplier = 1

Note ; Please read instruction "Notes" before using the sensor.
Fujikura reserves the right to change specifications without notice.

Fujikura Ltd.

If you have any questions regarding technical issues or specifications, please contact us.
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