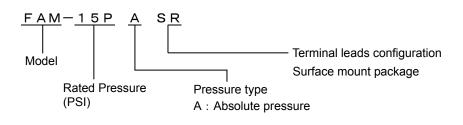
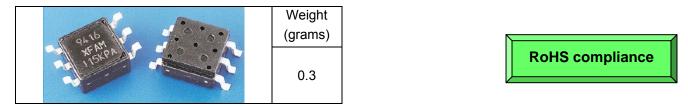
#### Features

Barometric pressure measurable Surface mount package

### Ordering Information





Measurable pressure range(kPa.abs)	Part number
34.66 to 168.0	FAM-15PASR

# Specifications

Specification	5		
	Model	FAM-15PASR	Unit
Recommen	ded operating condition	S	
P	ressure type	Absolute pressure	-
Rated pressure		168.0	kPa.abs
Measurable pressure range		34.66 to 168.0	kPa.abs
Temperature range		0 to 50	deg.C
Pressure media		Non-corrosive gases only (No liquid)	-
Excitation current (Constant)		1.5	mADC
Absolute m	aximum rating		
Maximum load pressure		Twice of rated pressure	-
Maximum excitation current		3.0	mADC
Operating temperature		-20 to 100	deg.C
Stora	ige temperature	-40 to 120	deg.C
Operating humidity		30 to 80 (Non dew condition)	%RH
Electric cha	racteristics (Drive Curre	ent 1.5mA constant ,ambient temperature Ta=25deg.C)	
Output span voltage		80 to 160 (at 34.66 to 168.0kPa.abs)	mV
Offset voltage		50 to 130 (at 101.3kPa.abs)	mV
Bridge resistance		4000 to 6000	Ω
Response time		2 (for the reference)	msec.
Accuracy	TSO*	+/-3	%FS/0-50deg.C
	TCS*	2.5	%FS/0-50deg.C
	Linearity	+/-0.3	%FS
	Pressure hysteresis	+/-0.2	%FS

\*TSO : Temperature sensitivity of offset voltage(Temperature range from 0-50 deg.C)

\*TCS : Temperature coefficient of output span voltage(Temperature range from 0-50 deg.C)

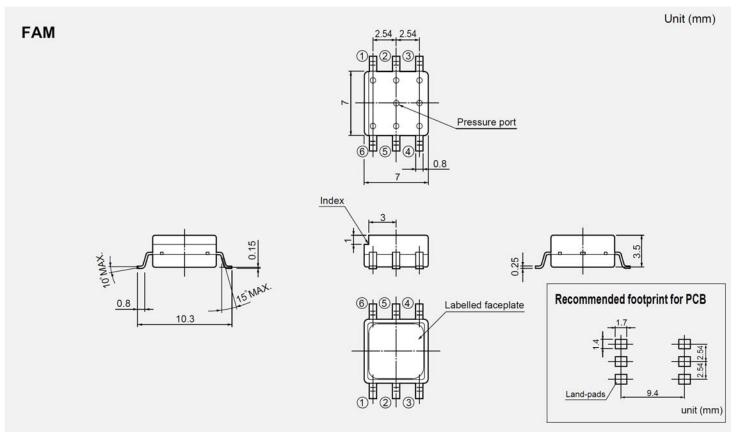


```
P1= 34.66 kPa.abs
                         T1= 0 deg.C
P2= 67.98 kPa.abs
                        T2= 25 deg.C
P3= 101.3 kPa.abs
                        T3= 50 deg.C
P4= 168.0 kPa.abs
Offset voltage (mV)
    Voff = V(P3,T)
                     at 101.3kPa.abs
Output voltage at full scale (mV)
    V(P1,T)
               at 34.66kPa.abs
    V(P4,T)
               at 168.0kPa.abs
Output span voltage (mV)
    SV = V(P4,T) - V(P1,T)
         SV(0) = V(P4,T1) - V(P1,T1)
         SV(25) = V(P4,T2) - V(P1,T2)
         SV(50) = V(P4,T3) - V(P1,T3)
Temperature sensitivity of offset voltage (%FS)
    TSO = {LARGER ONE} / SV(25) x 100
        LARGER ONE = larger absolute value which of {V(P3,T1)-V(P3,T2)} and {V(P3,T3)-V(P3,T2)}
Temperature coefficient of output span voltage (%FS)
    TCS = {max[SV(0),SV(25),SV(50)] - min[SV(0),SV(25),SV(50)] } / SV(25) x 100
Linearity (%FS)
    NL = {V(P2,T2) - [V(P1,T2)+V(P3,T2)]/2 } / SV(25) x 100
Pressure hysteresis (%FS)
    Phys = {V'(P3,T2) - V(P3,T2) } / SV(25) x 100
        V'(P3,T2) : Output voltage against P1 after stressing by P3 pressure.
```

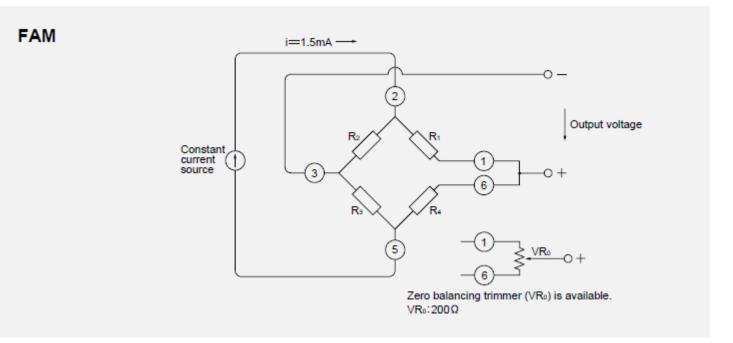


# FAM Data sheet

## ■Outline dimensions■

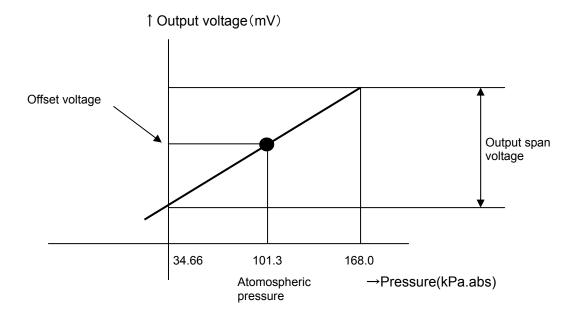


## ■Connection diagram■





#### Output characteristics

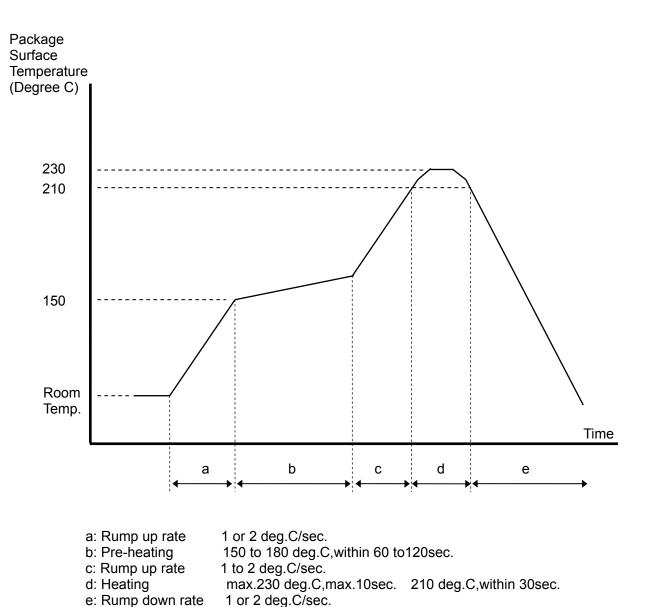


Note ; Please read instruction "Notes" before using the sensor. Fujikura reserves the right to change specifications without notice.

Please keep the sensors sealed using static shielding bags on storage. The pins of the sensor are plated by Ag. If the sensors expose to an atmosphere, the pins will be black by sulfuration.

Please set Zero-calibration function up your products. The offset voltage may be shifted some mechanical stress such as mounting, installation and etc. over longtime using.





#### Reflow Soldering process recommendation profile

- Note ; 1) Temperature means Surface temperature of the sensor package.
  - 2) Reflow process max. 2 times.
  - 3) Do not wash the sensor.
  - 4 ) Do not put the solder and flux on the sensor package.

If you have any questions regarding technical issues or specifications, please contact us. Fujikura Ltd. Sensor Department 5-1 Kiba 1-chome, Koto-ku, Tokyo 135-8512, Japan Phone +81-(0)3-5606-1072 E-mail : <u>sensor@fujikura.co.jp</u>

