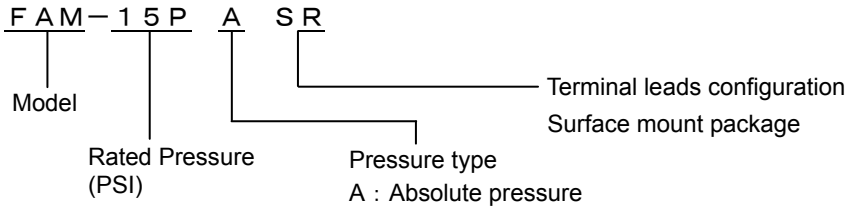
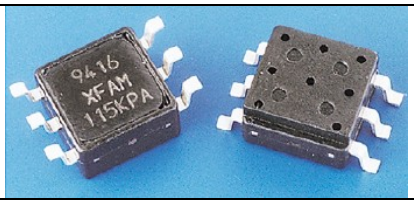
■Features

Barometric pressure measurable
Surface mount package

■Ordering Information





Weight (grams)
0.3

RoHS compliance

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

■Specifications

Model		FAM-15PASR	Unit
Recommended operating conditions			
Pressure 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 maximum rating			
Maximum load pressure		Twice of rated pressure	-
Maximum excitation current		3.0	mADC
Operating temperature		-20 to 100	deg.C
Storage temperature		-40 to 120	deg.C
Operating humidity		30 to 80 (Non dew condition)	%RH
Electric characteristics (Drive Current 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)

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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

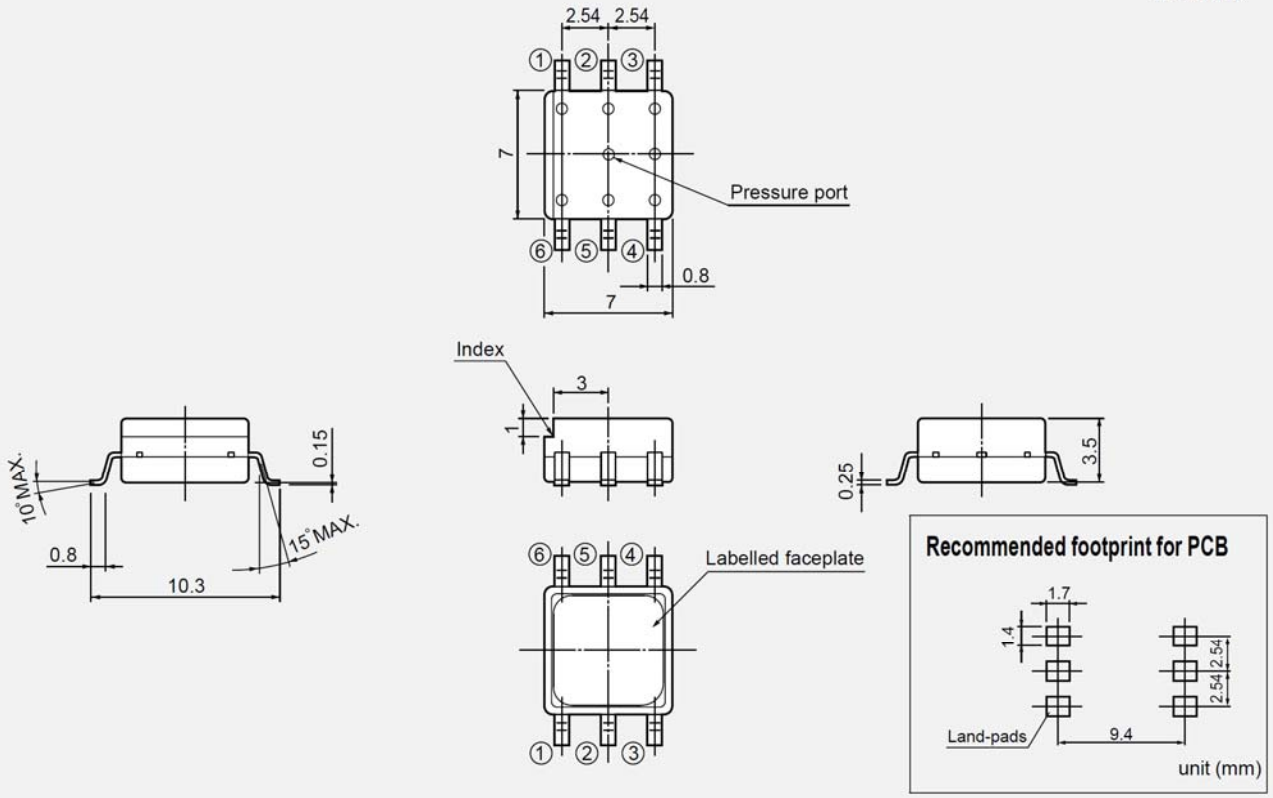
Linearity (%FS)
NL = {V(P2,T2) - [V(P1,T2)+V(P3,T2)]/2 } / SV(25) x 100

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.

■Outline dimensions■

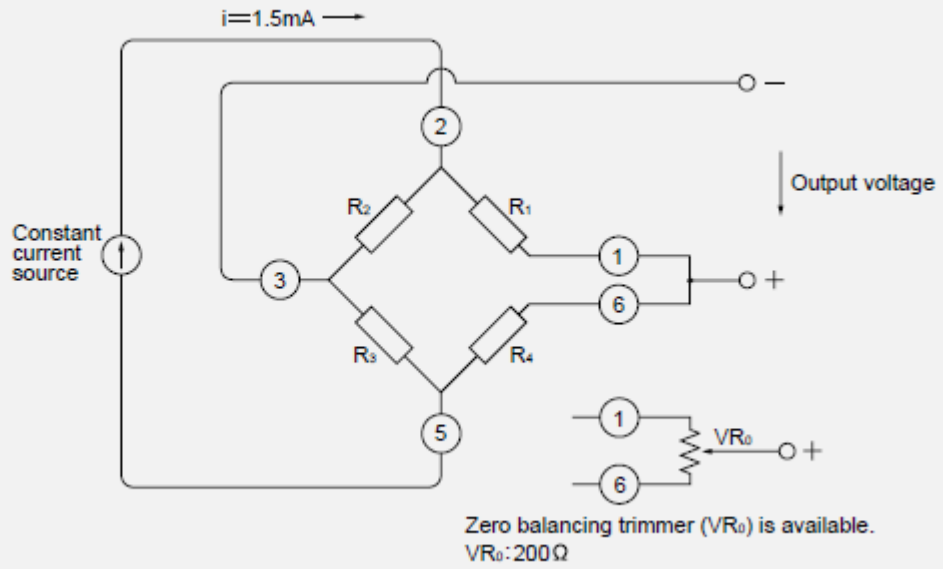
FAM

Unit (mm)

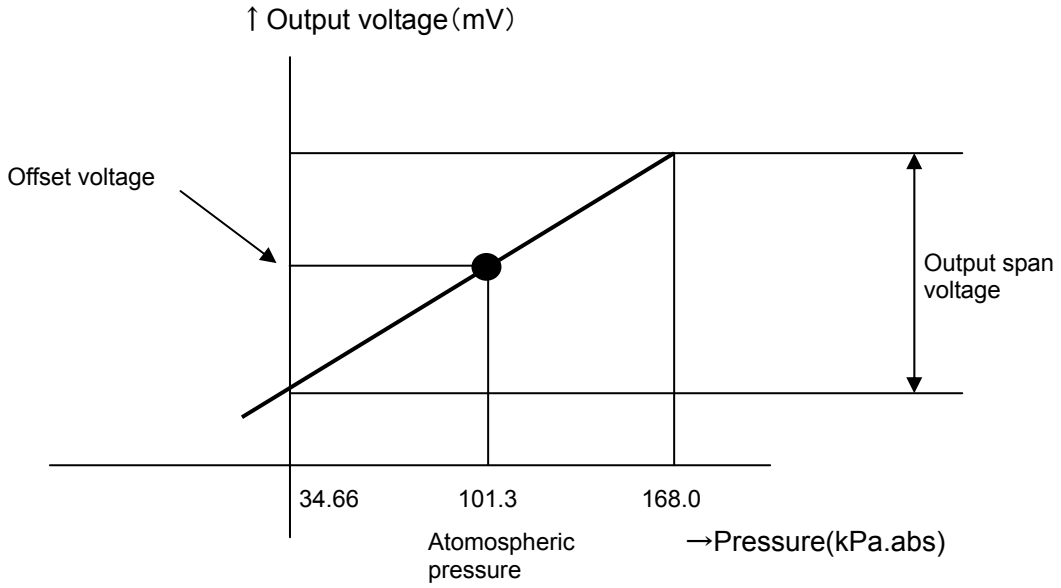


■Connection diagram■

FAM



■Output characteristics■

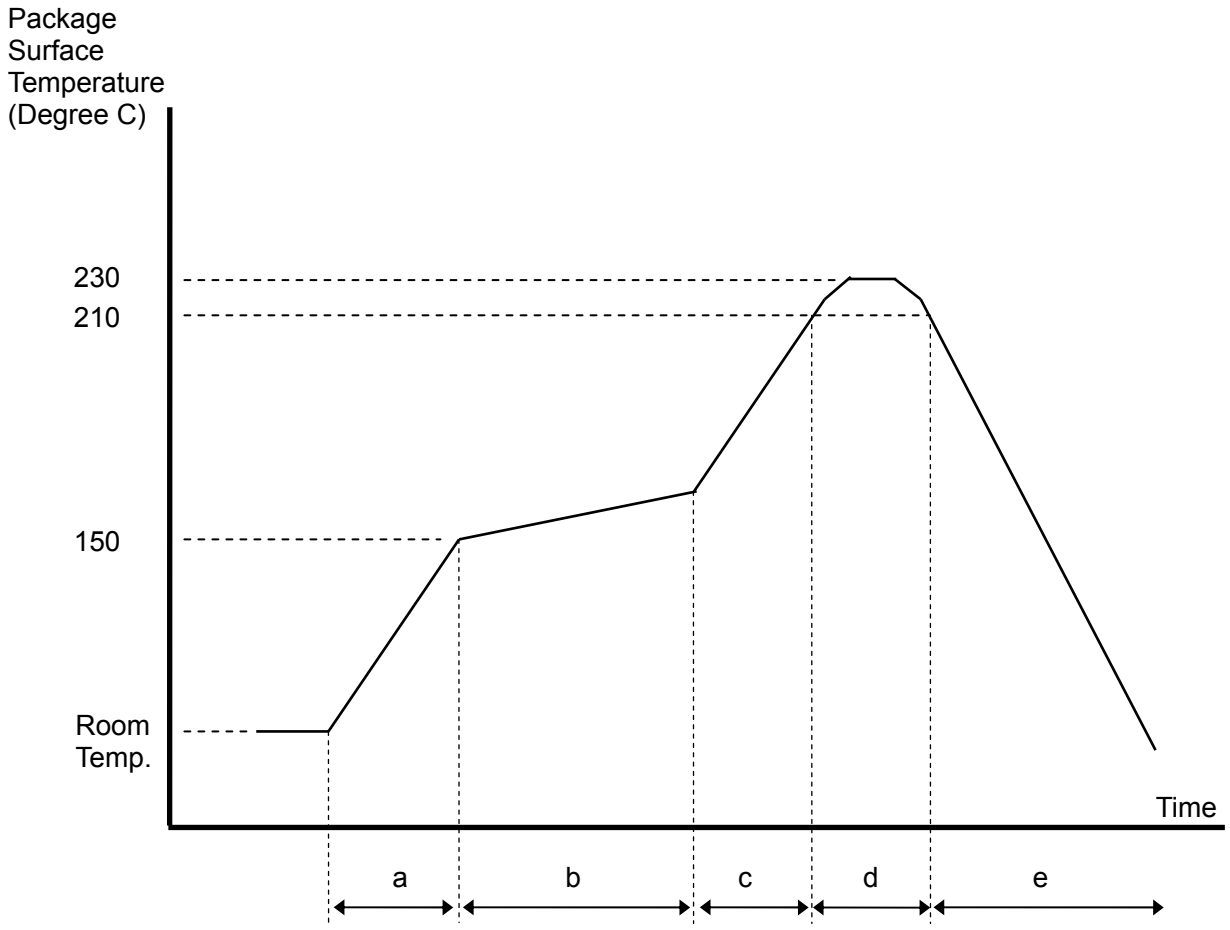


Note ; Please read instruction “Notes” before using the sensor.
Fujikura reserves the right to change specifications without notice.

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



a: Rump up rate 1 or 2 deg.C/sec.
b: Pre-heating 150 to 180 deg.C,within 60 to120sec.
c: Rump up rate 1 to 2 deg.C/sec.
d: Heating max.230 deg.C,max.10sec. 210 deg.C,within 30sec.
e: Rump down rate 1 or 2 deg.C/sec.

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.
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