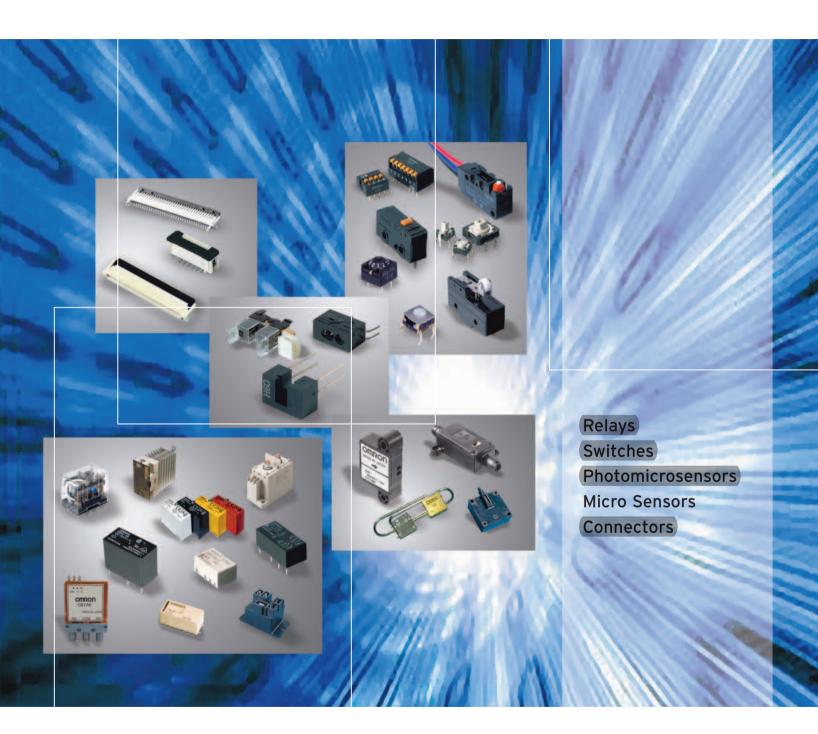
Electronic Components

Master Selection Guide





Micro Sensors - MEMS

Mass Air Flow 1~5L



Dimensions mm (in)

Features

D6F

15H x 20D x 66W (0.60 x 0.79 x 2.60)

Detects -

- · Breath rate in respiratory equipment
- Natural gas flow rate
- · Gas in fuel cells
- Flow in ventilation systems

Applicable gases Supply voltage Operating temp. range

Ordering information

Air, Natural gas, LP gas, O₂, and N₂O *

12 to 24VDC

-10° to +60°C

Case Gas Flow range Part number PPS 0~1L/min D6F-101A-110 0~2L/min D6F-102A-110 LNG 0~5L/min D6F-05N2-000

Mass Air Flow 10~50L



Dimensions mm (in)

Features

Applicable gases

Operating temp. range

Ordering information

Supply voltage

30H x 30D x 78L (1.18 x 1.18 x 3.07)

Precision unidirectional mass airflow up to 50LPM

D6F-10/20/50

- Stable output
- · Horizontal mounting with NBR 'O' ring
- Low power consumption

Air, Natural gas, LP gas, O2, & N2O*

12 to 24VDC

-10° to +60°C

Flow range Part number 0-10LPM D6F10A600 0-20LPM D6F20A600 0-50LPM D6F50A600

Air Velocity Sensor





Dimensions mm (in)

Features

Applicable gases Supply voltage **Output voltage** Operating temp. range

D6F-W

9H x 20Dx 39L (0.35 x 0.79 x 1.53

- Clogged filter detection
- Compact size
- Integral passive Dust Segregation System (DSS)
- · Fast fit for easy installation

Air*

12 - 24VDC 5VDC

-10° to +60°C

Ordering information Flow range Part number 0~1 m/sec flow range D6F-W01A 0~4 m/sec flow range D6F-W04A

8H x 13D x 24L (0.31 x 0.51 x 0.94)

Value engineered version of D6F-W

D6F-V

- Smaller package
- Lower Supply Voltage
- Built for OEM designs
- Internal passive Dust Segregation System (DSS)

Air* 3.3VDC

0 to 2VDC

-10° to +60°C

Flow range Part number 0~3 m/sec flow range D6F-V03A1

^{*}Contact Omron regarding other gases.

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Micro Sensors - MEMS

Pressure / Blood Pressure





Dimensions mm (in)

Features

30 H x 25.8 D x 30 W (1.18 x 1.02 x 1.18)

Applicable gases

Pressure range Output

Supply voltage **Current consumption** Operating temp. range

 Solid state MEMS pressure sensor with frequency output

D8M-R

Air, please inquire about other

0 - 0.78" of H₂0

80 - 300kHz (1kHz/9.81 Pa)

4.2 - 5.5VDC

10 mA max.

-20° to +70°C

Blood Pressure 2SMCP-10

6.2 x 4.8 x 8.3 (0.27 x 0.21 x 0.37)

- For applications using a minimum of 100,000 pieces per year only
- For pulse rate detection
- Electrostatic capacity style suitable for microcomputer input

0-280mm Hg (600mm Hg max.)

5VDC

0° to +50°C

Tilt





Dimensions mm (in)

Features

Operating angle Return angle Operating voltage (Vdd) Output voltage

> Low High

Current consumption Operating temp. range **Ordering information** D₆B

5.50 H x 3.75 D x 5.50 W (0.22 x 0.15 x 0.22)

- Utilizes Hall Effect technology
- For space-constrained applications
- Surface mount
- No EMC bounce

45~75° (output from high to low) 50~20° (output from low to high)

2.7~3.3VDC

0.5VDC max.

Vdd - 0.5VDC min.

 $20\mu A \text{ max.}$; $10\mu A \text{ typ (Vcc} = 3VDC)$ -10° to +60°C

D6B-2

D₆BN

2 H x 7 D x 7 W (0.08 X 0.28 x 0.28)

- Utilizes Hall Effect technology
- Low profile less than 1mm
- Surface mount
- No EMC bounce

40~80° (left & right)

50~10° (left & right)

2.4 ~ 3.6VDC

0.4VDC max.

Vdd - 0.4VDC max.

1mA max., 1µ standby

-10° to +60°C

D6BN-1

D7E

Shock/ Vibration/Tilt



Dimensions mm (in)

Features

Operating angle

Contact capacity

Service life

23.1 H x 23.6 D x 36.4 W (0.91 x 0.93 x 1.43)

Compact tilt sensor

- Responds to gradual tilting of 1degree/sec
- Self-resetting
- Quick-connect terminals
- PCB version available (D7A)

50~80°

Return angle (reset) 25° or more

> 0.1mA @ 5VDC to 100mA at 30VDC resistive load

SPST-NC

Contact form Operating temp. range -25° to +60°C

5000 operations min.



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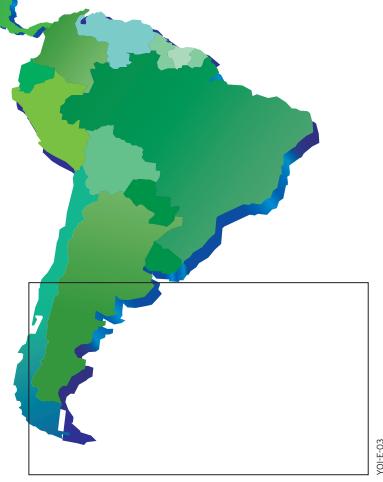
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- (iv) Systems, machines, and equipment that could present a risk to life or property. NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE END PRODUCT AS A WHOLE HAS BEEN DESIGNED TO ADDRESS RELEVANT RISKS, AND THAT THE OMRON PRODUCT IS PROPERLY RATED AND INSTALLED FOR ITS INTENDED USE.



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