

Component Sensors

OMRON D6BN SERIES: MICRO TILT SENSOR

Features:

- Surface mounting tilt sensor fits space-confined installations
- Low profile 2mm-Detect tilting over a range of 40 to 80 degrees in right-and-left inclination
- Gull wing surface mount terminals
- Operating temperature range: -10°C to 60°C

Applications:

- Ideal for PDAs, cell phones, test equipment, digital cameras and video cameras to change aspect ratio automatically
- Replaces mercury switches in portable space heaters and gaming machines, such as pinball games, and slot machines



RoHS Compliant

For quantities of 100 and up, call for quote.

| MOUSER STOCK NO. | Omron Part No. | Fig. | Operating Voltage | Operation Angle | Price Each | | | |
|------------------|----------------|------|-------------------|-----------------|------------|------|------|------|
| | | | | | 1 | 10 | 25 | 50 |
| 653-D6BN-1(P) | D6BN-1(P) | A | 2.4 to 3.6 VDC | 40° to 80° | 5.60 | 5.03 | 4.61 | 4.19 |

DIMENSIONS: mm

A

B

C

D

E

F

G

H

I

J

K

OMRON D6F SERIES: GAS MASS FLOW SENSORS

World's Smallest Flow Sensor Elements!

The exceptional performance of the D6F is achieved using the world's smallest, supersensitive flow sensor elements with an area of just 1.5mm sq., achieving a size of just 1/7th that of other flow sensors in the same class. The D6F is suitable for gas flows of up to 10m/s from any direction.

Specifications:

- Dielectric strength: 500VAC between terminals and base
- Operating temperature: -10 to 60°C

Features:

- Small size
- Fast response
- Applicable to air, non-corrosive gas, LNG Ideal for looking at low pressure medical gases, boiler emissions, and HVAC system airflow

Applications:

- Medical equipment
- Combustion control
- Analysis instruments

For quantities of 10 and up, call for quote.

| MOUSER STOCK NO. | Omron Part No. | Fig. | Rated Range | Applicable Fluid | Case Material | Power Supply (Vcc Max) | Output Voltage (Vout Max) | Price Each | | |
|------------------|----------------|------|--------------|--------------------|-------------------------|------------------------|---------------------------|------------|--------|--------|
| | | | | | | | | 1 | 2 | 5 |
| 653-D6F-01A1-110 | D6F-01A1-110 | B | 0-1L/min. | Air | PPS | 26.4 VDC | 6 VDC | 180.00 | 162.00 | 159.60 |
| 653-D6F-02A1-110 | D6F-02A1-110 | B | 0-2L/min. | Air | PPS | 26.4 VDC | 6 VDC | 180.00 | 162.00 | 159.60 |
| 653-D6F-03A3-000 | D6F-03A3-000 | C | 0 - 3 L/min. | Air | Thermoplastic/ Aluminum | 26.4 VDC | 5.7 VDC | 194.38 | 186.22 | 178.45 |
| 653-D6F-05N2-000 | D6F-05N2-000 | D | 0-5L/min. | Liquid Natural Gas | Aluminum | 26.4 VDC | 6 VDC | 270.00 | 243.00 | 229.50 |
| 653-D6F-10A5-000 | D6F-10A5-000 | E | 0-10L/min. | Air | PPS | 26.4 VDC | 6 VDC | 270.00 | 240.50 | 218.45 |
| 653-D6F-20A5-000 | D6F-20A5-000 | E | 0-20L/min. | Air | PPS | 26.4 VDC | 6 VDC | 270.00 | 240.50 | 218.45 |
| 653-D6F-50A5-000 | D6F-50A5-000 | E | 0-50L/min. | Air | PPS | 26.4 VDC | 6 VDC | 270.00 | 240.50 | 218.45 |

Cables

For quantities of 10 and up, call for quote.

| MOUSER STOCK NO. | Omron Part No. | Description | Price Each | | |
|------------------|----------------|--|------------|------|------|
| | | | 1 | 2 | 5 |
| 653-D6F-CABLE1 | D6F-CABLE1 | For D6F-01, D6F-02, D6F-05, D6F-10, D6F-20, D6F-50 Gas Mass Flow Sensors | 9.40 | 8.45 | 8.00 |
| 653-D6F-CABLE2 | D6F-CABLE2 | For D6F-03 Gas Mass Flow Sensor | 6.46 | 6.02 | 5.67 |

OMRON D6F-W SERIES: GAS VELOCITY AND CLOGGED FILTER SENSORS

Features:

- A dust-resistant design has been taken into consideration, by the original dust segregation structure of OMRON.
- ±10% Full-Scale repeatable accuracy achieves consistent air velocity measurement.
- Applications include clogged-filter detection and air velocity.

For quantities of 10 and up, call for quote.

| MOUSER STOCK NO. | Omron Part No. | Fig. | Rated Range | Applicable Fluid | Case Material | Power Supply (Vcc Max) | Output Voltage (Vout Max) | Price Each | | |
|------------------|----------------|------|-------------|------------------|---------------------|------------------------|---------------------------|------------|-------|-------|
| | | | | | | | | 1 | 2 | 5 |
| 653-D6F-W01A1 | D6F-W01A1 | F | 1 m/sec | Air | PPS | 10-26.4 VDC | 1-5 V non-linear | 90.00 | 85.00 | 80.00 |
| 653-D6F-W04A1 | D6F-W04A1 | F | 4 m/sec | Air | PPS | 10-26.4 VDC | 1-5 V non-linear | 90.00 | 85.00 | 80.00 |
| 653-D6F-V03A1 | D6F-V03A1 | G | 0-3 m/sec | Air | Thermoplastic resin | 12.0 VDC | 3.0 V | 39.75 | 35.79 | 31.80 |

Cable

For quantities of 10 and up, call for quote.

| MOUSER STOCK NO. | Omron Part No. | Description | Price Each | | |
|------------------|----------------|---------------------------|------------|------|------|
| | | | 1 | 2 | 5 |
| 653-D6F-WCABLE | D6F-WCABLE | Cable for D6F Clog Sensor | 4.28 | 3.85 | 3.63 |

OMRON D7 SERIES VIBRATION SENSORS

Features:

- Quick detection of movements that could cause damage to equipment
- D7A/D7E - Auto-resettable - no manual setting required

Applications:

- Industrial equipment
- Any system requiring safety shutoff during a period of vibration or tilting

For quantities of 25 and up, call for quote.

| MOUSER STOCK NO. | Omron Part No. | Fig. | Detection Sensitivity | Contact Form | Description | Contact Rating | Price Each | | |
|------------------|----------------|------|-----------------------|--------------|-------------------------------------|------------------------------|------------|-------|-------|
| | | | | | | | 1 | 5 | 10 |
| 653-D7A-1 | D7A-1 | H | 90-170gal | SPST-NO | Horizontal PCB mount | 5mA@ 3VDC - 1mA @ 3VDC | 25.29 | 22.35 | 22.02 |
| 653-D7A-2 | D7A-2 | H | 90-170gal | SPST-NO | Vertical PCB mount | 5mA@ 3VDC - 1mA @ 3VDC | 25.29 | 22.35 | 22.02 |
| 653-D7A-3 | D7A-3 | H | 90-170gal | SPST-NO | Chassis mount | 5mA@ 3VDC - 1mA @ 3VDC | 30.32 | 27.96 | 26.45 |
| 653-D7E-1 | D7E-1 | I | 130-200gal | SPST-NC | Sealed vibration sensor | 0.1mA @ 5VDC - 100mA @ 30VDC | 7.31 | 6.98 | 6.62 |
| 653-D7E-2 | D7E-2 | I | 100-170gal | SPST-NC | Sealed vibration sensor | 0.1mA @ 5VDC - 100mA @ 30VDC | 4.82 | 4.30 | 4.06 |
| 653-D7E-3 | D7E-3 | I | - - - | SPST-NC | Tilt switch, 50-80° detection angle | 0.1mA @ 5VDC - 100mA @ 30VDC | 7.31 | 6.98 | 6.62 |

ALPS SPSA VIBRATION SENSOR

Specifications:

- Ratings: 1mA @ 5VDC to 100mA @ 30VDC
- Operating life: 5000 cycles

Features:

- Resistant to corrosive gas and humidity
- Sliding contact with high reliability

Applications:

- Combustion equipment and aquarium heaters
- Detection of tampering

For quantities of 100 and up, call for quote.

| MOUSER STOCK NO. | ALPS Part No. | Fig. | Detection Sensitivity | Contact Form | Vibration Specification | Price Each | | |
|------------------|---------------|------|------------------------------------|--------------|---------------------------------|------------|------|------|
| | | | | | | 1 | 25 | 50 |
| 688-SPSA100100 | SPSA100100 | J | 130 - 200 gal (cm/s ²) | SPST-NC | 10-55 Hz, 1.5mm total amplitude | 7.48 | 5.24 | 4.49 |

ALPS SPSF VIBRATION/TILT SENSOR

Specifications:

- Reflow solderable
- Packaged on tape and reel

Features:

- Detects tilt movement in 4 directions
- Can be mounted on either side of the board

Applications:

- Detection of vertical/horizontal in handheld devices
- Detection of posture and movement of toy or robot

For quantities of 100 and up, call for quote.

| MOUSER STOCK NO. | ALPS Part No. | Fig. | Detection Angle | Contact Rating | Dimensions (LxWxH) | Price Each | | |
|------------------|---------------|------|-----------------|----------------|-----------------------|------------|------|------|
| | | | | | | 1 | 25 | 50 |
| 688-SPSF100100 | SPSF100100 | K | 50°± 20° | 1mA @ 5VDC | 6.2mm X 6.2mm X 3.4mm | 2.92 | 2.04 | 1.75 |