

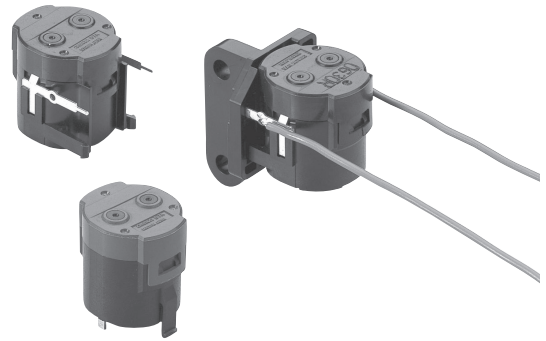
D7A

Automatic Horizontal Vibration Sensor



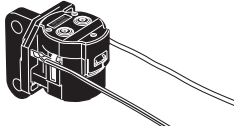
Quickly Detect Earthquakes to Help Prevent Secondary Disasters. Auto-level Mechanism Enables Mounting at $\pm 5^\circ$

- Auto-level mechanism for mounting leeway of $\pm 5^\circ$.
- Models provided for mounting to horizontal PCBs, vertical PCBs, or with screws.

RoHS Compliant



Ordering Information

| Appearance | Mounting type | Model |
|---|------------------|---------|
|  | Horizontal mount | D7A-1 |
|  | Vertical mount | D7A-2 |
|  | Screw mount | D7A-3-1 |

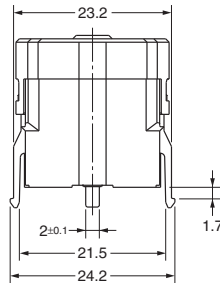
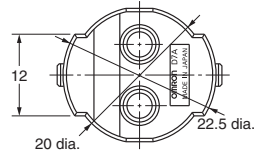
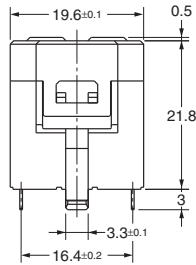
Performance

| Item | Model Type | D7A-1 | D7A-2 | D7A-3-1 |
|--------------------------|----------------------------|---|----------------|-------------|
| | | Horizontal mount | Vertical mount | Screw mount |
| Operating characteristic | Acceleration range | 90 to 170 gals* | | |
| | Contact form | SPST-NO | | |
| Output | Electrical ratings | 5 μ A to 1mA at 3 VDC | | |
| | Contact resistance | Initial value: 1 Ω max. (measured at terminals) | | |
| | Electrical life expectancy | 10,000 operations (at 10 to 20 operations/min with resistive load of 1 mA at 3 VDC) | | |
| Basic specifications | Degree of protection | IP40 (switch section) | | |
| | Operating temperature | -30 to 70°C (with no icing or condensation) | | |
| | Storage temperature | -40 to 70°C (with no icing or condensation) | | |
| | Operating humidity | 25% to 85% | | |
| | Dielectric strength | 250 VAC, 50/60 Hz for 1 min | | |

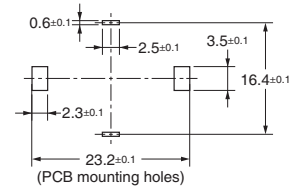
* This is the average value of three measurements that were taken with the continuous horizontal vibration method with periods of 0.3 s, 0.5 s, and 0.7s.
Note: Ask your OMRON representative for details.

■ Dimensions (Unit: mm)

D7A-1

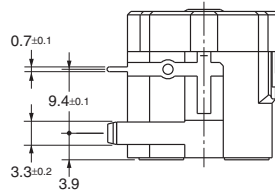
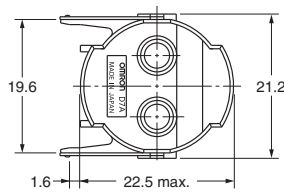
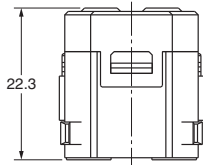
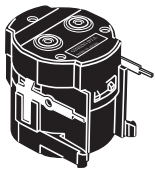


PCB Mounting Holes

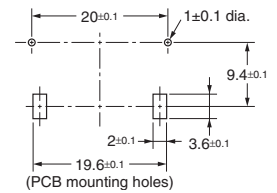


Note: Mount the Vibration Sensor to a PCB with a thickness of 1.6 mm and solder it.

D7A-2

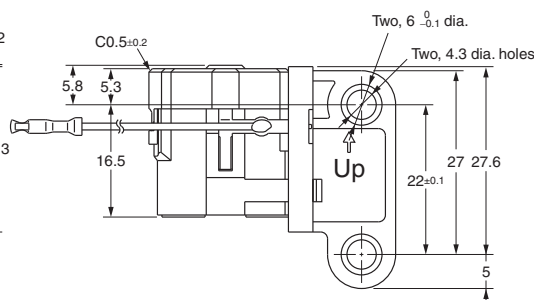
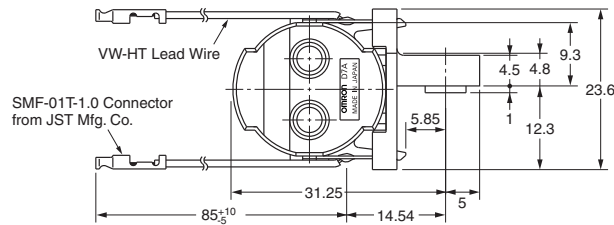
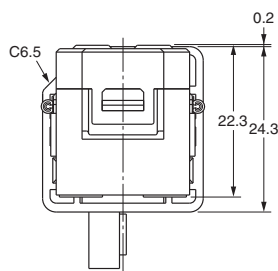
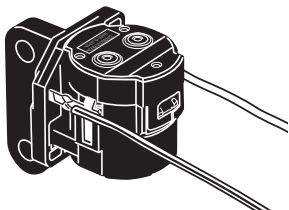


PCB Mounting Holes

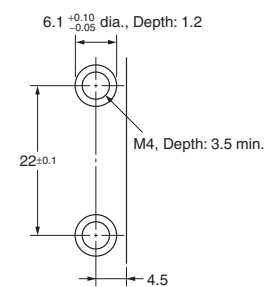


Note: Mount the Vibration Sensor to a PCB with a thickness of 1.6 mm and solder it.

D7A-3-1



Mounting Hole Dimensions



Note: Mount the Vibration Sensor with M4 mounting screws or the equivalent and tighten the screws to a torque of 0.981 to 1.176N·m

■ Safety Precautions

- These Vibration Sensors are precision devices. Handle them with care. Never use a Vibration Sensor that has been dropped. Also, if a Vibration Sensor has been subjected to excessive shock, do not handle it as a normal Vibration Sensor and inspect it again or take other measures to confirm proper operation.

Please check each region's Terms & Conditions by region website.

OMRON Corporation

Electronic and Mechanical Components Company

Regional Contact

Americas

<https://www.components.omron.com/>

Asia-Pacific

<https://ecb.omron.com.sg/>

Korea

<https://www.omron-ecb.co.kr/>

Europe

<http://components.omron.eu/>

China

<https://www.ecb.omron.com.cn/>

Japan

<https://www.omron.co.jp/ecb/>