

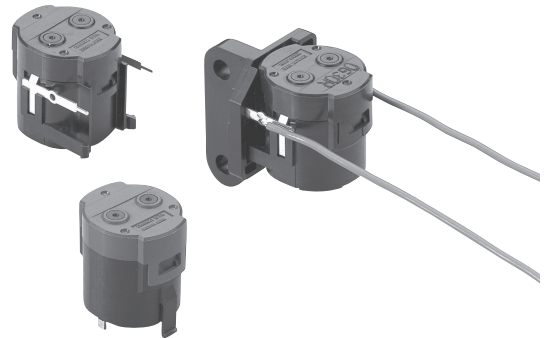
D7A

Automatic Horizontal Vibration Sensor



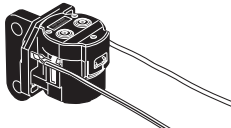
Quickly Detect Earthquakes to Help Prevent Secondary Disasters. Auto-level Mechanism Enables Mounting at $\pm 5^\circ$

- 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		
	Electrical ratings	5 μ A to 1mA at 3 VDC		
Output	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		

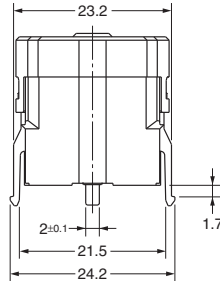
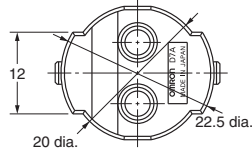
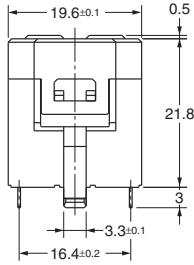
* This is the average value of three measurements that were taken with the continuous horizontal vibration method with periods of 0.3 s, 0.5 s, and 0.7s.
Note: Ask your OMRON representative for details.

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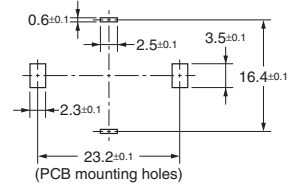
Automatic Horizontal Vibration Sensor

■ Dimensions (Unit: mm)

D7A-1

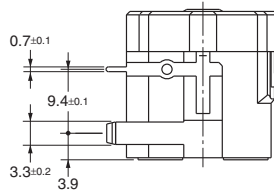
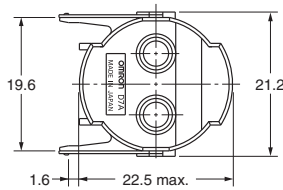
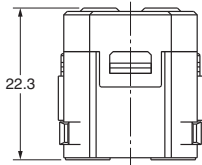
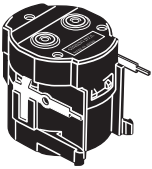


PCB Mounting Holes

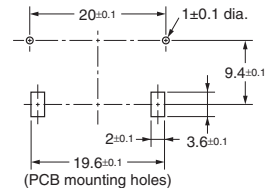


Note: Mount the Vibration Sensor to a PCB with a thickness of 1.6 mm and solder it.

D7A-2



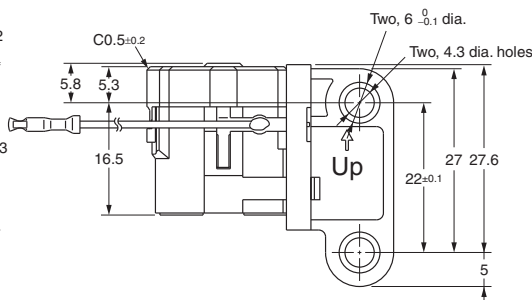
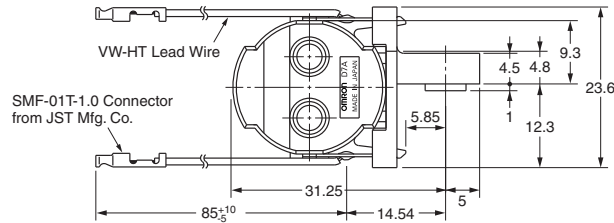
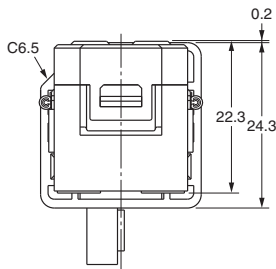
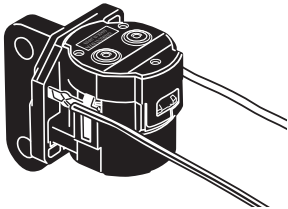
PCB Mounting Holes



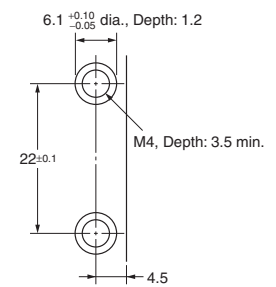
Note: Mount the Vibration Sensor to a PCB with a thickness of 1.6 mm and solder it.

D7A-3-1

D7A



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.

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

Note: Do not use this document to operate the Unit.