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.



■Ordering Information

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

■ Performance

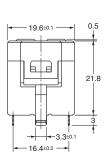
Model		D7A-1	D7A-2	D7A-3-1	
Item Type		Horizontal mount	Vertical mount	Screw mount	
Operating characteristic	Acceleration range	90 to 170 gals*			
Output	Contact form	SPST-NO			
	Electrical ratings	5 μA to 1mA at 3 VDC			
	Contact resistance	Initial value: 1 Ω max. (measured at terminals)			
Basic specifica- tions	Electrical life expectancy	10,000 operations (at 10 to 20 operations/min with resistive load of 1 mA at 3 VDC)			
	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			

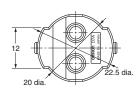
^{*} This is the average value of three measurements that were taken with the continuous horizontal vibration method with periods of 0.3 s, 0.5 s, and 0.7s. Note: Ask your OMRON representative for details.

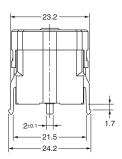
■ Dimensions (Unit: mm)

D7A-1

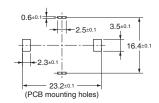








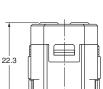
PCB Mounting Holes

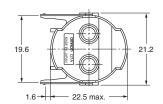


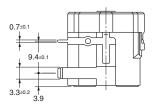
Note: Mount the Vibration Sensor to a PCB with a thickness of 1.6 mm and solder it.

D7A-2

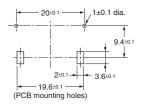






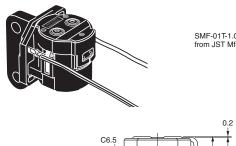


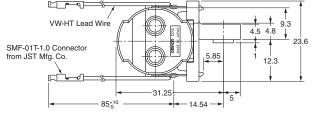
PCB Mounting Holes



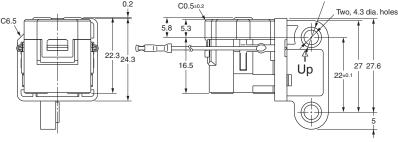
Note: Mount the Vibration Sensor to a PCB with a thickness of 1.6 mm and solder it.

D7A-3-1

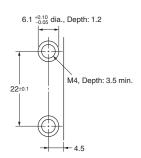




Two, 6 -0.1 dia.



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.

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