

Piezoresistive accelerometer Model 727



Key features

- Lightweight 0.3 grams
- Exceptional frequency response
- Adhesive mount
- 10 feet of integral cable

Description

The 727 is an extremely lightweight piezoresistive accelerometer designed to measure shock during the drop testing of consumer electronic devices. Available in 2kg, 6kg, 20kg and 60kg ranges, the 727 can measure shocks in g ranges well above current drop test sensors. It is designed to be mounted with adhesive, and at only 0.3 grams for the accelerometer body and 1.1 grams per foot for the cable, mass loading to the test object is minimal. The 727 has exceptional frequency response, from DC-10kHz for 2kg range up to DC-100kHz for the 60kg range, to capture the entire frequency range of interest. The standard unit comes with an A2LA certified calibration taken at 10 volts and 120 inches of integral cable.



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All specifications assume +75°F (+24°C). Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

Specifications						
Dynamic characteristics	Units	2К	6К	20K	60K	
Range	g	2000	6000	20 000	60 000	
Sensitivity	-					
Typical	μV/V/g	10	3	1	0.3	
Minimum	μV/V/g	5	1.5	0.5	0.15	
Frequency Response +/-5% Typical	kHz	0-10	0-20	0-50	0-100	
ZMO	mV/V	10	10	10	10	
Resistance	Ω	650 ± 300	650 ± 300	650 ± 300	650 ± 300	
Resonant frequency (typ)	kHz	90	180	350	700	
Over range	g	3000	9000	30 000	90 000	
Electrical characteristics						
Excitation	Vdc	2 to 12 (10 V standard)				
Isolation resistance	mΩ	100 Mohm at 50 Vdc between the sensor				
		(all leads tied together) and cable shield or case				
Environmental characteristics						
Temperature range						
Operating		32°F to +158°F (0°C to +70°C)				
Storage		-40°F to +185°F (-40°C to +85°C)				
Physical characteristics						
Weight	gram (oz)	0.3 (0.01)				
Case material		AL 6061-T6, hard anodized				
Cable		36 AWG SPC, braided shield, FEP jacket				
Cable weight	oz/ft	0.04				

Please refer to IM727 for mounting and de-mounting instructions.

Accessories			
Product	Description	727	
EDV42894	Removal tool	Supplied	
4418	Single channel bridge signal conditioner	Optional	

Notes

- 1. Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at 866-ENDEVCO for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.
- 2. Model number definition:



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