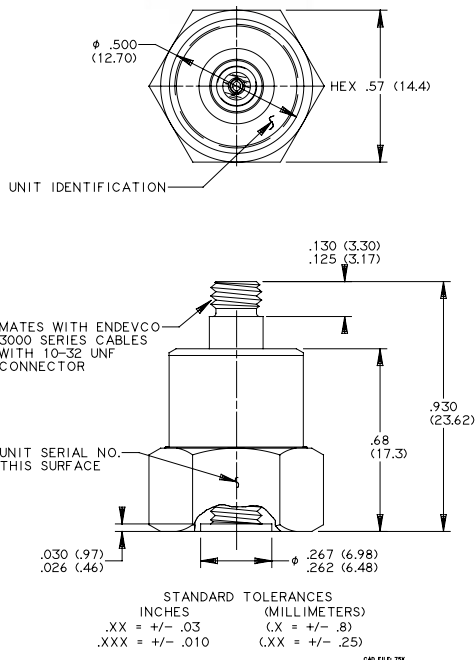




Model 752A12 / A13 ISOTRON® accelerometer

Features

- Built-in IEEE P1451.4 TEDS
- Hermetically sealed, rugged
- Exceptional resolution
- Wide bandwidth (flat to 10 kHz)
- Aerospace, automotive and general laboratory applications

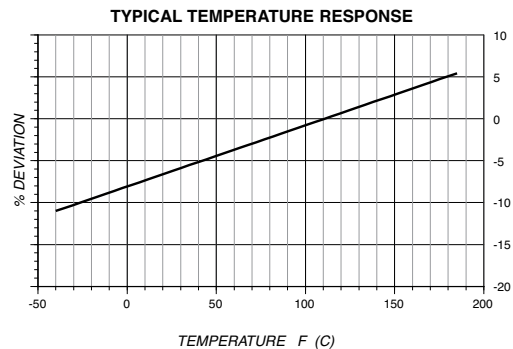
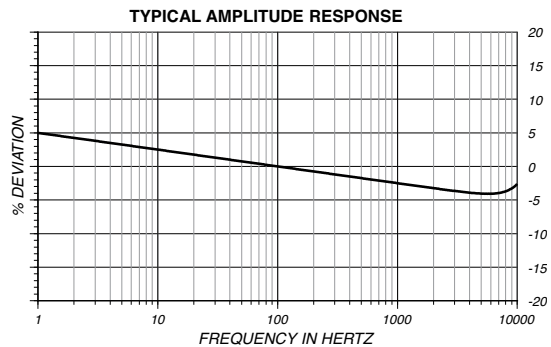


Description

The Endevco model 752A is a lightweight piezoelectric accelerometer with integral electronics, which features IEEE P1451.4 Transducer Electronic Data Sheet (TEDS) capabilities. This accelerometer offers exemplary dynamic range and frequency response, and maintains excellent phase characteristics over its entire operating frequency range. Model 752A also demonstrates outstanding shock survivability. This unit is designed to withstand most rough handling in laboratory environments without sustaining internal damage. This unit features a 10-32 top connector and a hex mounting base utilizing a 10-32 mounting stud.

The model 752A can be powered by any signal analyzer that features a 2 to 10 mA constant current supply. The model 752A features Endevco's PIEZITE® Type P-8 crystal element. Signal ground is isolated from the mounting surface. The model 752A is available in a 100 mV/g version, 752A12 and a 1V/g version, 752A13.

Endevco signal conditioner models 133, 2792B, 2793, 4416B or OASIS 482B, 433, 428 are recommended for use with this accelerometer.



Model 752A12 / A13 ISOTRON® accelerometer

Endevco

Specifications

The following performance specifications conform to ISA-RP-37.2 (1964) and are typical values, referenced at +75°F (+24°C) and 100 Hz, unless otherwise noted. Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

Dynamic characteristics	Units	752A12	752A13
Range	g	±50	±5
Voltage sensitivity, typical	mV/g	100	1000
Frequency response	See typical curve		
Amplitude response			
±5%	Hz	1 to 8000	
±1dB	Hz	0.3 to 10 000	
Phase response, ±5%	Hz	1	2
Resonance frequency	kHz	28	
Transverse sensitivity	%	≤ 5	
Temperature response	See typical curve		
Amplitude nonlinearity	%	≤ 1	
Output characteristics			
Output polarity	Acceleration applied into the base of the unit provides positive output		
DC output bias voltage	Vdc	+12 ±1	
Output impedance			
from 2 to 3 mA	Ω	≤ 300	
> 3 to 10 mA	Ω	≤ 100	
Full scale output voltage	V	±5	
Residual noise (1 Hz to 10 kHz bandwidth)	eq. g rms	0.00006	0.00006
Grounding	Signal ground is connected to the case and isolated from the mounting surface		
Power requirements			
Supply voltage	Vdc	+18 to +30	
Supply current	mA	+2 to +10	
Warm-up time (to reach 90% of final bias)	sec	< 5	
Environmental characteristics			
Temperature range			-4°F to +185°F (-20°C to +85°C)
Humidity			Hermetically sealed
Sinusoidal vibration limit	g	±300	
Shock limit	g pk	5000	
Base strain sensitivity (at 250 µstrain)	eq. g / µstrain	0.001	
Thermal transient sensitivity	eq. g / °F [°C]	0.025 [0.045]	
Physical characteristics			
Dimensions	See outline drawing		
Weight	gm (oz)	13 [0.45]	
Case material	Titanium inner/outer case		
Connector	Coaxial receptacle w/ 10-32 UNF thread designed to mate w/ Endevco model 3000 series cables		
Mounting torque	lbf-in (Nm)	18 [2]	
Calibration			
Supplied:			
Voltage sensitivity	mV/g		
Maximum transverse sensitivity	%		
Frequency response	%	20 Hz to 8 kHz	
Accessories			
Model 3061A-120 (10 ft)	Cable assembly		
OASIS accessories			
Model 36004	Smart hand held programmer		
Model 36018	TEDS editor kit		
Model 482B	i-TEDS/ISOTRON® signal conditioner card		



OASIS 2000
TEDS signal conditioner

Notes:

- Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at 800-982-6732 for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.



Continued product improvement necessitates that Endevco reserve the right to modify these specifications without notice. Endevco maintains a program of constant surveillance over all products to ensure a high level of reliability. This program includes attention to reliability factors during product design, the support of stringent Quality Control requirements, and compulsory corrective action procedures. These measures, together with conservative specifications have made the name Endevco synonymous with reliability.

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