

i-TEDS Accelerometer

**ENDEVCO
MODEL
752A12/A13**

MODEL 752A12 and 752A13

- Built-In IEEE P1451.4 TEDS
- Hermetically Sealed, Rugged
- Exceptional Resolution
- Wide Bandwidth (Flat to 10 kHz)
- Aerospace, Automotive and General Laboratory Applications



Actual size

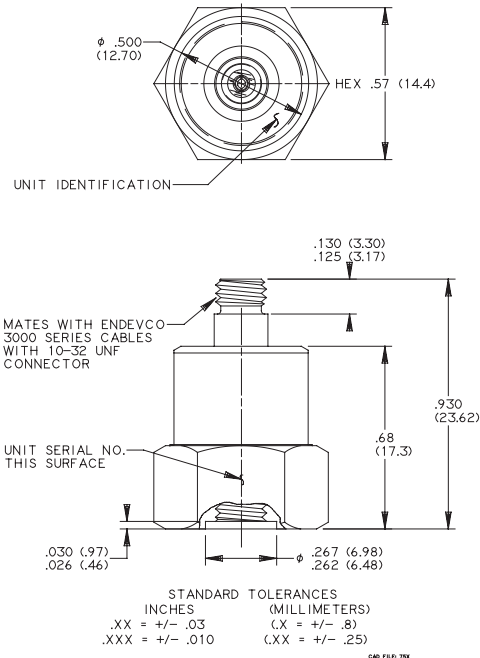


DESCRIPTION

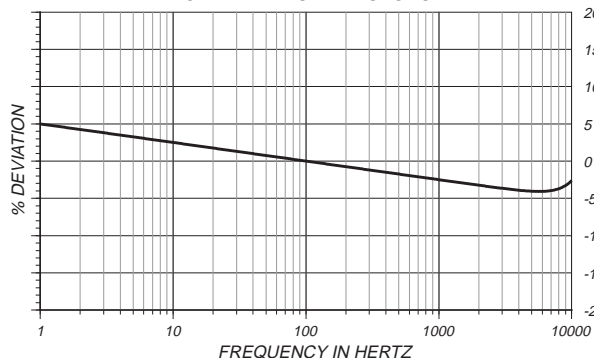
The ENDEVCO® Model 752A is a lightweight piezoelectric accelerometer with integral electronics, which features IEEE P1451.4 Transducer Electronic Data Sheet (TEDS) capabilities. This accelerometer offers exemplary dynamic range and frequency response, and maintains excellent phase characteristics over 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 100mV/g version, 752A12 and a 1V/g version, 752A13.

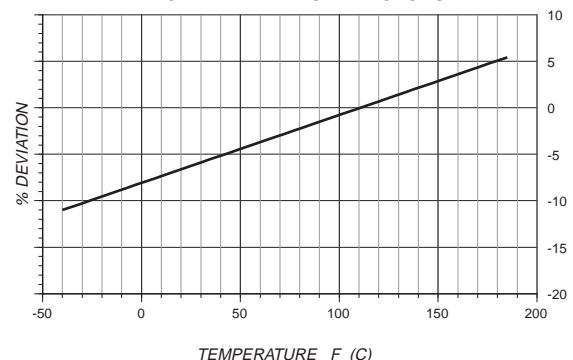
ENDEVCO Signal Conditioner Models 133, 2792B, 2793, 4416B or OASIS 482B, 433, 428 are recommended for use with this accelerometer.



TYPICAL AMPLITUDE RESPONSE



TYPICAL TEMPERATURE RESPONSE



ENDEVCO MODEL 752A12/A13

ISOTRON® Accelerometer

SPECIFICATIONS

The following performance specifications conform to ISA-RP-37.2 (1964) and are typical values, referenced at +75°F (+24°C), 4 mA, 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 Curves	
Amplitude Response			
±5%	Hz	1 to 8000	
±1dB	Hz	.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	eq. g rms	0.00006	0.00006
1 Hz to 10 kHz bandwidth			
GROUNDING		Signal ground is connected to the case and isolated from the mounting surface	

POWER REQUIREMENT

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	eq. g/μstrain	0.001
At 250 μstrain		
THERMAL TRANSIENT SENSITIVITY	eq. g /°F (°C)	.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 with Endevco Model 3000 series cable
MOUNTING TORQUE	lbf-in (Nm)	18 (2)

CALIBRATION

SUPPLIED:		
VOLTAGE SENSITIVITY	mV/g	
MAXIMUM TRANSVERSE SENSITIVITY	%	
FREQUENCY RESPONSE	%	20 Hz to 8kHz

ACCESSORIES

Model 3061A-120 (10 ft) CABLE ASSEMBLY

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.

OTHER ENDEVCO PRODUCTS FOR MODAL MEASUREMENT

OASIS ACCESSORIES

Model 36004
Model 36018
Model 482B

SMART HAND HELD PROGRAMMER
TEDS EDITOR KIT
i-TEDS/ISOTRON SIGNAL
CONDITIONER CARD



OASIS 2000
TEDS Signal Conditioner

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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