

OEM Accelerometer

**ENDEVCO
MODEL
525**

Model 525

- Low Impedance
- Low-Noise, High Resolution
- TO-5 Packaging
- Wide Bandwidth
- Low Cost / OEM Applications

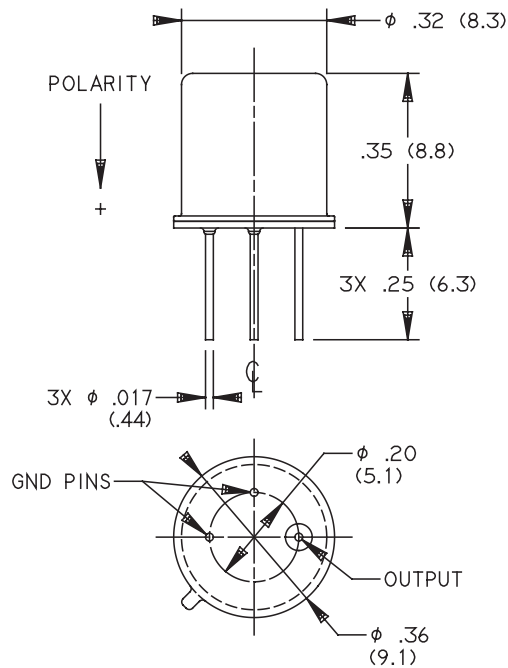


DESCRIPTION

The ENDEVCO Model 525 is a miniature piezoelectric accelerometer with internal electronics, configured in a TO-5 package for high volume OEM applications. As a low-impedance piezoelectric device, the Model 525 offers a wide frequency response, high shock survivability and low noise. The Model 525 is designed specifically to provide high-performance integrated vibration measurement of machines, structures or vehicles. Mounting hardware and cabling are eliminated. The device is designed for integration in standard hybrid or SMT electronics packaging and may be mounted by either adhesive or soldering.

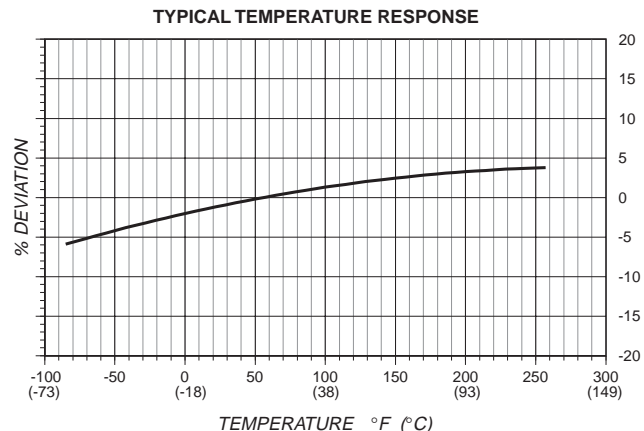
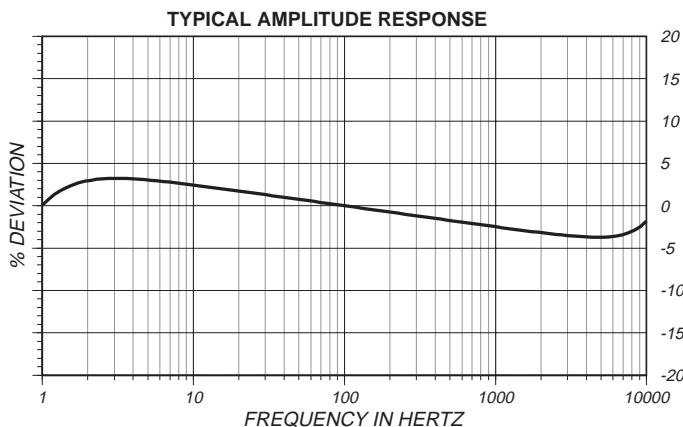
The ENDEVCO Model 525 is a hermetically sealed design capable of withstanding long-term reliability in harsh environments. The Model 525 is available in two power ranges.

525-01 : +18v to +28v, 2mA to 20mA.
525-02 : +5v to +18v, 0.39mA to 2mA.



STANDARD TOLERANCE
INCHES (MILLIMETERS)
.XX = +/- .03 (X = +/- .8)
.XXX = +/- .010 (XX = +/- .25)

BRAVO: 5128



APPLIES TO CALIFORNIA FACILITY

OEM Accelerometer

SPECIFICATIONS

Values are typical at +23°C, referenced at 100 Hz and conform to ISA-RP 37.2 (1-64) unless otherwise specified.

DYNAMIC CHARACTERISTICS	Unit	-01 Option		-02 Option	
		525-10-01	525-100-01	525-10-02	525-100-02
RANGE	g	±500	±50	±100	±100
VOLTAGE SENSITIVITY (±20%)	mV/g	10	100	10	100
FREQUENCY RESPONSE		See Typical Curve			
RESONANCE FREQUENCY	Hz	30000		30000	
AMPLITUDE RESPONSE ±10	Hz	0.5 to 12 000		0.5 to 12 000	
TEMPERATURE RESPONSE					
Sensitivity deviation at (0°C to 40°C)	%	±5		±5	
Sensitivity deviation at (-20°C to +85°C)	%	±10		±10	
TRANSVERSE SENSITIVITY	%	< 5		< 5	
AMPLITUDE LINEARITY	%	< 1		< 1	

ELECTRICAL CHARACTERISTICS

SUPPLY VOLTAGE	Vdc	+18 to +28		+5 to +18	
SUPPLY CURRENT	mA	+2 to +20		+0.39 to +2	
WARM-UP TIME	sec	<2		<2	
DC OUTPUT BIAS VOLTAGE	Vdc				
ROOM TEMPERATURE		+11.5 to +12.5		+3.2 to 3.5	
OVEN OPERATING TEMP (-55°C TO +125°C)		+7 to +14		+2.7 to 3.6	
FULL SCALE OUTPUT VOLTAGE	Vdc	±5		±1	
NOISE (Broadband)	µgrms	300	100	300	100

OUTPUT CHARACTERISTICS

OUTPUT POLARITY		See Outline Drawing		See Outline Drawing	
GROUNDING		Signal Ground Connects to Case		Signal Ground Connects to Case	
OUTPUT IMPEDANCE	Ω	<100		<100	

ENVIRONMENTAL CHARACTERISTICS

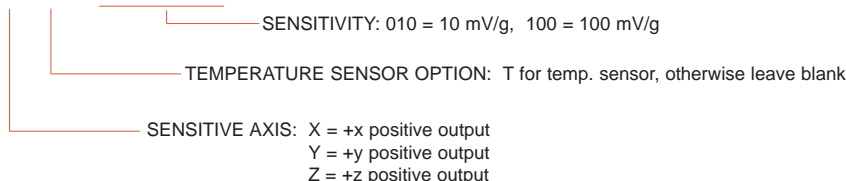
OPERATING TEMPERATURE		-54°C to +125°C (-65°F to +257°F)		-54°C to +125°C (-65°F to +257°F)	
HUMIDITY		Hermetic		Hermetic	
SINUSOIDAL VIBRATION LIMIT	g pk	±800		±800	
SHOCK LIMIT [1]	g pk	10000		10000	

PHYSICAL CHARACTERISTICS

DIMENSIONS		TO-5 package 0.36" dia, 0.40" tall		TO-5 package 0.36" dia, 0.40" tall	
WEIGHT oz (gram)		0.10 (2.8)		0.10 (2.8)	
HEADER		Kovar, gold plated		Kovar, gold plated	
LID		Stainless Steel		Stainless Steel	
OUTPUT CONNECTION		1 Output lead 2 ground leads		1 Output lead 2 ground leads	

PART NUMBERING AND ORDERING

525 - - - -



ACCESSORIES

No accessories included.

- 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.

NOTES

- Shock pulses of short duration may excite the transducer resonance. Shock levels above the sinusoidal limit may produce temporary zero shift which will result in erroneous data.

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.