OEM Accelerometer

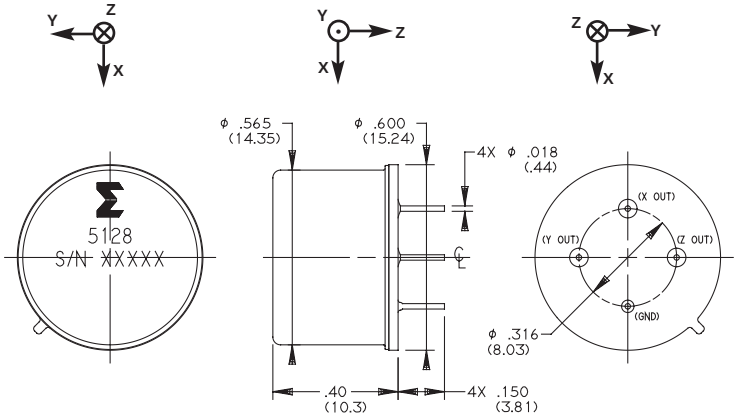
ENDEVCO MODEL 5128-X-Y

Model 5128

- **TO-8 Construction**
- **Single, Biaxial or Triaxial Configuration**
- **Wide Bandwidth**
- **Low Cost / OEM Applications**

DESCRIPTION

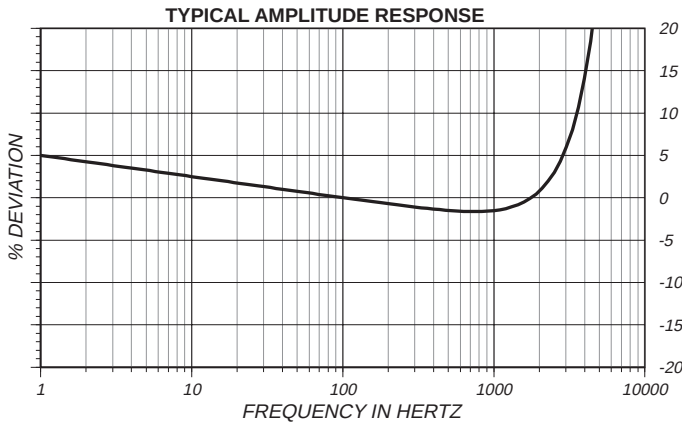
The ENDEVCO Model 5128 is a miniature piezoelectric accelerometer designed specifically for high volume OEM application. The unit can be configured as a single, biax or triax accelerometer within the same TO-8 package. The Model 5128 is designed specifically to provide high-performance integrated vibration 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.

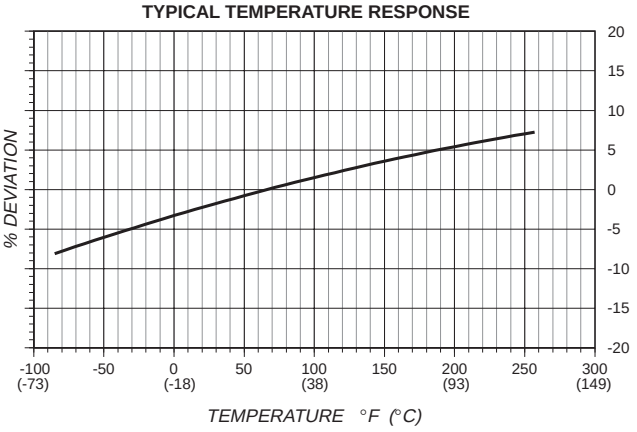


The ENDEVCO Model 5128 is a hermetically sealed design capable of withstanding long-term reliability in harsh environments.

Configuration for the 5128 are specified below:

	-x	-y	
5128	-1	-1	x-axis only (single axis)
	-1	-2	y-axis only (single axis)
	-1	-3	z-axis only (single axis)
	-2	-1	y-and z-axes (Biaxial)
	-2	-2	x-and z-axes (Biaxial)
	-2	-3	x-and y-axes (Biaxial)
	-3		x-y and z-axes (Triaxial)





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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	Units	5128
CHARGE SENSITIVITY	pC/g	1.5
RESONANCE	Hz	10,000
AMPLITUDE RESPONSE ±1dB	Hz	1 to 3500
TEMPERATURE RESPONSE		
Sensitivity deviation at -40°C	%	+3.5
Sensitivity deviation at +125°C	%	-3.7
TRANSVERSE SENSITIVITY	%	< 5
AMPLITUDE LINEARITY	%	< 1 to full scale
ELECTRICAL CHARACTERISTICS		
CAPACITANCE	pF	550
RESISTANCE	MΩ	>1
OUTPUT CHARACTERISTICS		
OUTPUT POLARITY		Shown in Outline Drawing
GROUNDING		Signal Ground Connects to Case
ENVIRONMENTAL CHARACTERISTICS		
OPERATING TEMPERATURE		-55°C to +125°C (-67°F to +257°F)
HUMIDITY		Hermetic
SINUSOIDAL VIBRATION LIMIT	g pk	500
SHOCK LIMIT [1]	g pk	4000
BASE STRAIN SENSITIVIY	eq g/µ strain	<.001
THERMAL TRANSIENT SENSITIVITY [2]	eq g / °F	0.02
PHYSICAL CHARACTERISTICS		
DIMENSIONS		TO-8 package 0.60” dia, 0.40” tall
WEIGHT	oz (gm)	0.71 (2)
CASE MATERIAL		Stainless Steel
SUPPORT		Kovar, gold plated
LID		Stainless Steel
OUTPUT CONNECTION		1 Output lead 1 ground
CALIBRATION		
SUPPLIED		
SENSITIVITY		pC/g

NOTES

1. Shock pulses of short duration may excite the transducer resonance. Shock levels above the sinusoidal vibration limit may produce temporary zero-shift, which will result in erroneous velocity or displacement data after integration of the acceleration signal.
2. This parameter is dependent on subsequent high-pass filtering. Values listed are representative of a 1 Hz high pass filter. Filters with a higher corner frequency will result in values lower than published in this data sheet.
3. 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.

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