OEM Accelerometer

Model 528

- Low Impedance
- Low-Noise, High Output
- TO-8 Packaging
- Wide Bandwidth
- Low Cost / OEM Applications

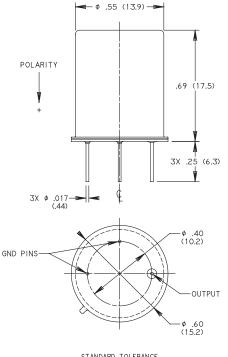


DESCRIPTION

The ENDEVCO Model 528 is a miniature piezoelectric accelerometer configured in a TO-8 package. As a low-impedance piezoelectric device, the Model 528 offers a wide frequency response, high shock survivability and low noise. The Model 528 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.

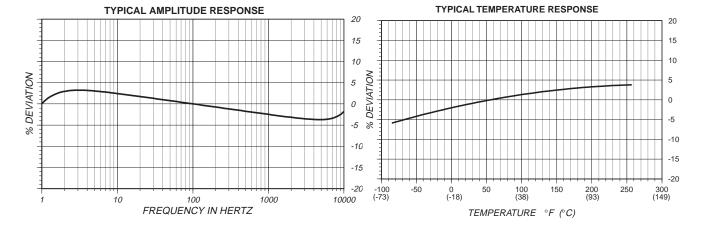
The ENDEVCO Model 528 is a hermetically sealed design capable of withstanding long-term reliability in harsh environments. The Model 528 is available with two power configuration options:

528-01: +18 to +28 VDC, 2 to 20 mA constant current 528-02: +5 to +18 VDC, 0.39 to 2 mA constant current



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

BRAVO: 5128









ENDEVCO MODEL 528

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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 | 528-100 | 528-500 | 525-1000 |
|---------------------------------|-------|---------|-------------------|----------|
| RANGE | g | ±50 | ±25 | ±5 |
| VOLTAGE SENSITIVITY (±20%) | mV/g | 100 | 500 | 1000 |
| RESONANCE FREQUENCY | KHz | | | |
| AMPLITUDE RESPONSE ±10% | Hz | | 0.5 to 10 000 | |
| 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

| SUPPLY VOLTAGE | Vdc | (-01)+18 | to +28 (-0 | 2)+5 to +18 |
|---------------------------|-------|------------|------------|----------------|
| SUPPLY CURRENT | mA | (-01)+2 to | o +20 (-0 | 2)+0.4 to +2 |
| WARM-UP TIME | sec | | <5 | |
| DC OUTPUT BIAS VOLTAGE | Vdc | (-01)+7 to |) +14 (-0) | 2)+2.7 to +3.6 |
| FULL SCALE OUTPUT VOLTAGE | Vdc | | 1.6V | |
| NOISE BROADBAND | μVrms | 100 | 50 | 10 |

OUTPUT CHARACTERISTICS

| OUTPUT POLARITY | |
|-----------------|--------------------------------|
| GROUNDING | Signal Ground Connects to Case |

ENVIRONMENTAL CHARACTERISTICS

| OPERATING TEMPERATURE | | -54°C to +125°C |
|----------------------------|------|-------------------|
| | | (-65°F to +257°F) |
| HUMIDITY | | Hermetic |
| SINUSOIDAL VIBRATION LIMIT | g pk | 500 |
| SHOCK LIMIT [1] | g pk | 10000 |
| BASE STRAIN SENSITIVIY | | |

PHYSICAL CHARACTERISTICS

| THI GIOAL GHARAGILIRIGHE | ,0 | |
|--------------------------|-----------|------------------------|
| DIMENSIONS | | TO-8 package |
| | | 0.60" dia, 0.40" tall |
| WEIGHT | oz (gram) | 0.88 (25) |
| CASE MATERIAL | | Stainless Steel |
| SUPPORT | | Kovar, gold plated |
| LID | | Stainless Steel |
| OUTPUT CONNECTION | | 1 Output lead 1 ground |

ACCESSORIES

No accessories included.

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.