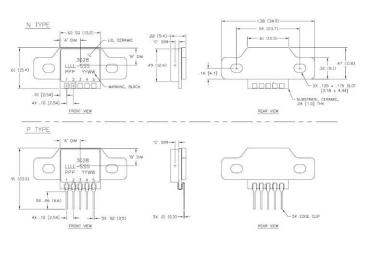
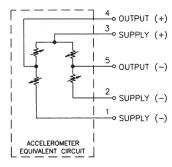




ROHS (E

dimensions





MODEL 3028 ACCELEROMETER

SPECIFICATIONS

- Piezoresistive MEMS
- DC Response, mV Output
- Low Cost
- Screw Mounted Flange

The Model 3028 is a silicon MEMS accelerometer in a Wheatstone bridge configuration. It is packaged on a ceramic substrate with a metal bracket which can be used to bolt the sensor to the mounting location. The accelerometer is offered in ranges from ±2g to ±200g range and provides a flat frequency response to minimum 2000Hz. The silicon MEMS sensor is gas damped and incorporates over-range stops for high-g shock protection.

For a similar accelerometer designed for adhesive mounting, see the model 3022

FEATURES

- Bolt Mounted
- ±0.5% Non-linearity
- Open Wheatstone Bridge
- DC Response
- Gas Damping
- Built-in Overrange Stops.
- Low Power Consumption

APPLICATIONS

- Vibration & Shock Monitoring
- Motion Control
- Impact & Shock Testing
- Modal Analysis
- Embedded Applications
- Machinery

PERFORMANCE SPECIFICATIONS

All values are typical at +24°C, 80Hz and 5Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters DYNAMIC Range (g) Sensitivity (mV/g) ¹ Frequency Response (Hz) Natural Frequency (Hz) Non-Linearity (%FSO) Transverse Sensitivity (%) Damping Ratio Shock Limit (g)	±2 8.0-20.0 0-150 700 ±0.5 3 0.7 5000	±5 6.0-15.0 0-250 800 ±0.5 3 0.7 5000	±10 3.0-6.0 0-400 1000 ±0.5 3 0.7 5000	±20 1.5-3.0 0-600 1500 ±0.5 3 0.7 5000	±50 0.6-1.5 0-1000 4000 ±0.5 3 0.7 5000	±100 0.3-0.6 0-1500 6000 ±0.5 3 0.7 5000	±200 0.15-0.3 0-2000 8000 ±0.5 3 0.6 5000	Notes @5Vdc Exc. ±5%
ELECTRICAL Zero Acceleration Output (mV) Excitation Voltage (Vdc) Input Resistance (Ω) Output Resistance (Ω) Insulation Resistance (M Ω) Residual Noise (μ V RMS) Ground Isolation	±25 2 to 10 2500-6500 2500-6500 >100 10 Isolated fror	±25 2 to 10 2500-6500 2500-6500 >100 10 n Mounting Su	±25 2 to 10 2500-6500 2500-6500 >100 10 urface	±25 2 to 10 2500-6500 2500-6500 >100 10	±25 2 to 10 2500-6500 2500-6500 >100 10	±25 2 to 10 2500-6500 2500-6500 >100 10	±25 2 to 10 2500-6500 2500-6500 >100 10	Differential @50Vdc Maximum
ENVIRONMENTAL Thermal Zero Shift (%FSO/°C) Thermal Sensitivity Shift (%/°C) Operating Temperature (°C) Compensated Temperature (°C) Storage Temperature (°C)	-0.09 -0.15 -40 to +125 Not Comper -40 to +125	-0.09 -0.15 nsated	-0.09 -0.15	-0.09 -0.15	-0.09 -0.15	-0.09 -0.15	-0.09 -0.15	Typical Typical See Note 2
PHYSICAL Case Material Weight (grams) Mounting Mounting Torque	Aluminum Flange, Ceramic Cover 4.5 2x #4-40 Mounting Screws 6 Ib-in (0.7 N-m) itation voltage							
² Order model 3028-XXX-10256 for temperature compensation resistor values included in the calibration certificate.								

Optional accessories:	121	Three Channel DC Differential Amplifier
-	140A	Auto-Zero Inline Amplifier

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ORDERING INFO

PART NUMBERING Model Number+Range+Electrical Connection

3028-GGG-P

Electrical Connection (P=pins, N=solder pads) Range (010 is 10g)

Example: 3028-010-P Model 3028, 10g, Pins

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