

Temperature Hardened Accelerometer

The A0322RTS is an accelerometer based on quartz technology with an ability to withstand sudden temperature shocks such as from a water wash up from near maximum temperature to room temperature in just a few seconds.

Dynamic Performance

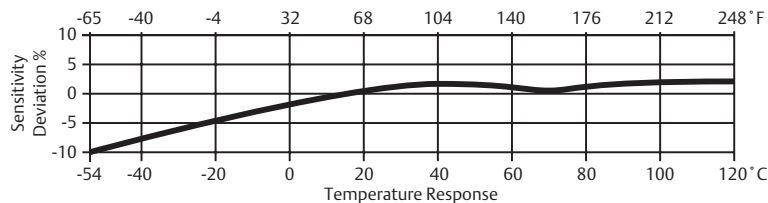
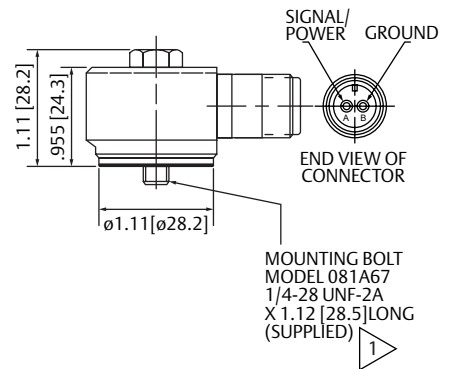
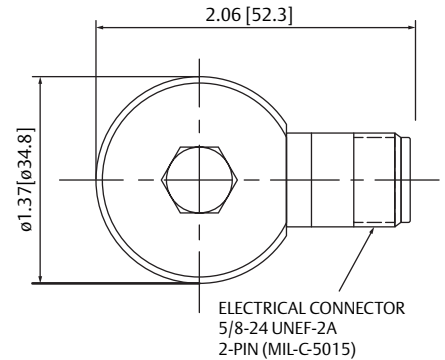
Sensitivity ($\pm 5\%$)	100 mV/g (10.2 mV/m/s ²)
Measurement Range	± 50 g (± 490 m/s ²)
Frequency Range:	($\pm 5\%$) 2.40 to 5000 Hz (144 to 300,000 cpm)
	($\pm 10\%$) 1.70 to 7000 Hz (102 to 420,000 cpm)
	(± 3 dB) 0.80 to 10000 Hz (48 to 600,000 cpm)
Mounted Resonant Frequency	18 kHz Nominal
Amplitude Linearity	$\pm 1\%$ (0 Based Least Squares Straight Line)
Transverse Sensitivity	$\leq 5\%$

Environmental

Shock Limit	5000 g pk (49050 m/s ²)
Temperature Range	-54 to 121°C (-65 to 250°F)
Sealing / Rating	Welded Hermetic / IP68

Electrical

Settling Time	≤ 10 sec (Within 1% Output Bias)
Discharge Time Constant	≥ 0.2 sec
Excitation Voltage / Current	18 to 28 VDC / 2 to 20 mA
Output Impedance	< 100 ohms
Output Bias	8 to 12 VDC
Broadband Resolution (1 to 10 KHz)	20 μ g (196 μ m/s ²) Electrical Noise
Case Isolation	$> 10^8$ ohms
Protection	RFI/ESD



Mechanical

Material / Weight	Stainless Steel / 120 grams (4.2 oz)
Mounting Thread	¼-28 UNF
Mounting Torque	2.7 to 6.8 Nm (2 to 5 lb ft)
Sensor Element / Geometry	Quartz / Shear
Connector Type (Side)	MIL-C-5015, 2 Pin

Supplied Accessories

Multi Point Calibration
¼-28 Mounting Bolt

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