

+260°C Charge Output Accelerometer 5.6pC/g output, 10kHz Bandwidth Hermetically Sealed Stud Mount, Top Connector





The Model 7505A is a stud mounted piezoelectric charge mode accelerometer with an operating temperature range to +260°C. The accelerometer is designed for high frequency vibration and shock measurements and offers a wide bandwidth to >10kHz and a nominal charge output of 5.6pC/g. The model 7505A features a hermetically sealed stainless steel housing and a #10-32 stud mount configuration.

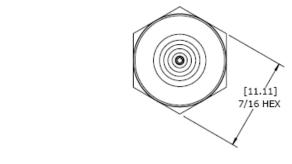
FEATURES

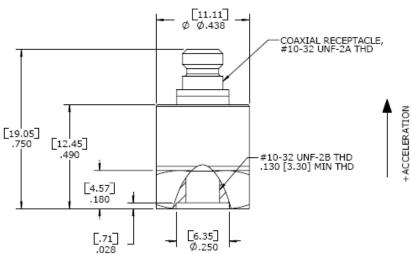
- -73°C to +260°C Operating Range
- Wide bandwidth up to >10kHz
- Stainless Steel Housing
- Annular Shear Mode
- Case Grounded
- 10-32 Top Connector

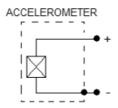
APPLICATIONS

- Vibration & Shock Monitoring
- High Temp Applications
- Laboratory Testing
- High Frequency Applications
- Gearbox Vibration Monitoring

dimensions







Model 7505A Accelerometer



performance specifications

All values are typical at +24°C, 100Hz unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice. Standard product parameters are described in PSC-1003 for Plug & Play AC Accelerometers.

Parameters

DYNAMICNotesSensitivity (pC/g)5.6TypicalSensitivity (pC/g)4.0MinimumFrequency Response (Hz) 21-10000±10%Frequency Response (Hz) 20.3-15000±2dB

Natural Frequency (Hz) 47000
Non-Linearity (%FSO) ±1/1000g
Transverse Sensitivity (%) <5
Dynamic Range (g) 1 ±4000
Shock Limit (g) 10000

ELECTRICAL

Capacitance (pF) 560 Nominal Insulation Resistance (M Ω) >100 @100Vdc

Grounding Case Grounded

ENVIRONMENTAL

Temperature Response (%) See Typical Temperature Response Curve

Operating Temperature (°C) -73 to +260 Storage Temperature (°C) -73 to +260

Humidity Hermetically Sealed

PHYSICAL

Sensing Element Ceramic (shear mode)
Case Material Stainless Steel

Weight (grams) 7.3

Mounting #10-32 to #10-32 Mounting Stud (included)

Mounting Torque 18 lb-in (2.0 N-m)

Operating range over which the accelerometer meets the linearity specifications
 Low-end response of the accelerometer is a function of its associated electronics.

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±2dB Frequency Response Limit

Supplied accessories: AC-D02298 10-32 to 10-32 mounting stud

Optional accessories: 320-XXX Cable Assembly, 10-32 to 10-32 (XXX designates length in inches, 10ft standard)

130 In-Line Charge Converter

161A 4-Channel PE & IEPE Signal Conditioner

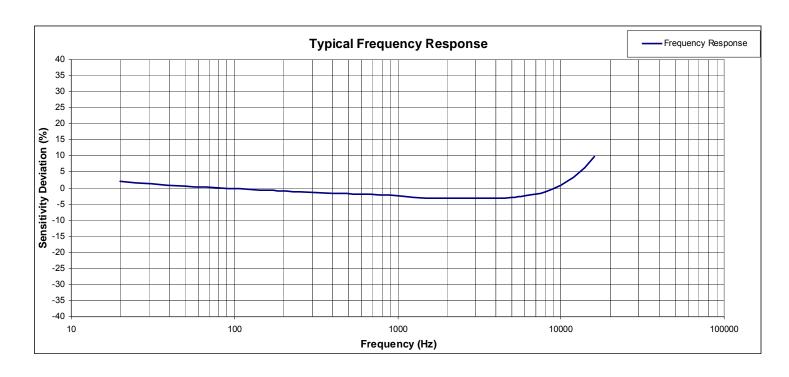
AC-D03105 Adhesive Mounting Adaptor AC-D03106 Magnetic Mounting Adaptor

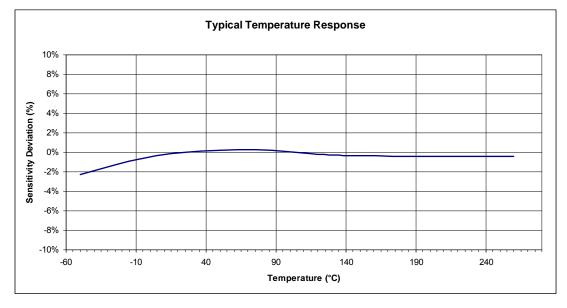
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Model 7505A Accelerometer



performance specifications





ordering info

PART NUMBERING Model Number

7505A