**PINOUT:**
Pin A - Case Ground
Pin B - Sig/Pwr Gnd Ret
Pin C - Sig/Pwr

3-PIN BAYONET STYLE
MS3433H989Pn CONNECTOR,
HERMETIC. SEE NOTE 6 FOR MATING
CONNECTOR SUGGESTIONS.

**DIAGRAM:**
- Ø.811, HEX CORNERS
- Ø.73
- 0.047 DIA LOCKWIRE HOLES, TYP. 2 HOLES
- Ø.75 ACROSS HEX FLATS
- 1/4-28 THREAD
- MOUNTING SURFACE Ø.541

**MODEL NUMBER**
33306A1

**SENSITIVITY**
5 mV/G

**MOUNTING SURFACE PREPARATION:**
PREPARE FLAT CIRCULAR AREA APPROX. Ø.750, FLAT TO WITHIN .0005 T.I.R. AT CENTER, DRILL Ø.213 X .320 DEEP MIN
BOTTOM TAP 1/4-28 UNF-2B X 270 DEEP MIN

**TYPICAL MATING ConnectORS ARE:**
- MS3476W898SN (STANDARD PLUG, CADMIUM FINISH). FOR PLUG W/RFI FINGERS:
  - MS3475 W898SN. OTHER VARIATIONS ARE AVAILABLE.

**MATERIAL, BODY & CONNECTOR:**
300 SERIES STAINLESS STEEL.

**SENSING ELEMENT:**
QUARTZ SHEAR.

INSULATION RESISTANCE: > 10 MEGOHMS.

**WEIGHT:** 37 GRAMS.

**MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERNAL SURFACES ARE ALLOWED DUE TO RESTRAINING AND HANDLING DURING TESTING, TRANSPORT OR PROCESSING. THESE APPEAR AS INDICATORS THAT DO NOT AFFECT FORM, FIT OR FUNCTION AS INTENDED BY DESIGN OR APPLICATION.**
**PHYSICAL**

- **Model Number:** 3306A1
- **Model Documentary Number:** DOC NO 3306A1
- **Revision:** REV D, ECN 10246, 08/16/13

**This family also includes:**
- **Low Temperature Application**
- **Electrically Linearly**
- **Hermetically Sealed**

**Supplied Accessories:**
1) Accredited calibration certificate (ISO 17025)
2) Physical measurement of dimensions and weights.
3) Measurement of vibration and shock tolerance.
4) Measurement of linearity and sensitivity.
5) Measurement of environmental parameters.
6) Measurement of electrical characteristics.

**PERFORMANCE SPECIFICATION**

**HIGH FREQUENCY IEPE QUARTZ SHEAR ACCELEROMETERS**

**Supplied Accessories:**
- 1) Accredited calibration certificate (ISO 17025)
- 2) Physical measurement of dimensions and weights.
- 3) Measurement of vibration and shock tolerance.
- 4) Measurement of linearity and sensitivity.
- 5) Measurement of environmental parameters.
- 6) Measurement of electrical characteristics.

**Notes:**
1) Measure at 100Hz, 1 Grms per ISA RP 37.2
2) Measure using zero-based straight line method, % of F.S. or any lesser range.
3) Do not apply power to this system without current limiting, 20mA MAX. To do so will destroy the IC charge amplifier.
4) Typical mating connectors are: MS3476W898SN (Standard plug, Cadmium finish). For plug W/RFI fingers: MS3475W898SN. Other variations are available.
5) Lock wire holes are included in the base.
6) In the interest of constant product improvement, we reserve the right to change specifications without notice.

**Physical:**
- **Weight:** 1.30 oz (37 grams)
- **Size:** Hex X Height = 0.750 X 1.4" = 19.05 X 35.56 mm
- **Mounting Provision:** Integral Stud 1/4-28 UNF-2A
- **Material:** Housing, Base and Connector 300 Series Si. IC charge amplifier.

**Performance:**
- **Sensitivity, ±5% [1]**
  - Range: F.S ± 5 Volts Output
  - Frequency Range: ±3dB
  - Resonance Frequency: ±35 kHz
  - Noise Floor: ±0.007 Gms/sq(iz)/Hz
  - Spectral Noise: ±0.002 Gms/sq(iz)/Hz
  - Linearity [2]: ±1% % F.S.
  - Maximum Transverse Sensitivity: 0.002 g/µs
  - Strain Sensitivity: 0.002 g/µs

**Environmental:**
- **Maximum Vibration:** ±1000 G's,peak
- **Maximum Shock:** ±600G,peak
- **Temperature Range:** -320 to +300°F
- **Seal:** Hermetic

**Electrical:**
- **Supply Current Range [3]:** 2 to 20 mA
- **Compliance Voltage Range:** +18 to +30 Volts
- **Output Impedance, Typ:** 100Ω
- **Bias Voltage:** +7.5 to +9.5 VDC
- **Discharge Time Constant:** 0.1 to 1.1 sec
- **Output Signal Polarity for Acceleration Towards Top:** Positive
- **Electrical Isolation, Ground (Pin B) to case (Pin A):** 10 GΩ, min

**Supplied Accessories:**
1) Accredited calibration certificate (ISO 17025)
2) Physical measurement of dimensions and weights.
3) Measurement of vibration and shock tolerance.
4) Measurement of linearity and sensitivity.
5) Measurement of environmental parameters.
6) Measurement of electrical characteristics.

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