5. MINOR Voids, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERIOR SURFACES ARE ALLOWED DUE TO RESTRRAINING 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.

4. MARKING DENOTES LOCATION OF SENSING ELEMENT'S CENTER OF MASS

3. MASTES WITH DYTRAN 6964AXX CABLE (XX DENOTES LENGTH IN FT)

2. WEIGHT: 38 GRAMS, MAX.

1. MATERIAL: TITANIUM ALLOY.

NOTES: UNLESS OTHERWISE SPECIFIED
2X FLAT WASHERS, MODEL 6754, SUPPLIED

2X MOUNTING SCREW, MODEL 6753A1 (8-32 x 1.0), SUPPLIED
2X MOUNTING SCREW, MODEL 6687A1 (M4x0.7 X 25mm), SUPPLIED

RECOMMENDED MOUNTING PREPARATION:
PREPARE FLAT MOUNTING SURFACE EQUAL TO OR BETTER THAN .001 TIR.
TAP 8-32 UNRC-3B .200 MIN. (OR 2X M4 X 0.7-6g .20 [5.1] MIN.)
RECOMMENDED TORQUE 10-12 LB-IN. (1.12-1.35 N-m).

1/4-28 UNF-2B

(1/4-28 UNF-2A)

STUD, MODEL 6691,
1/4-28 UNF-2A TO M6 X 1, SUPPLIED

(RECOMMENDED MOUNTING PREPARATION: MODEL 6691
PREPARE MOUNTING SURFACE, Ø 1.25 [31.2] MIN, FLAT TO .001 TIR.
TAP M6 X 1 Ø .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.)

MOUNTING STUD, MODEL 6360,
1/4-28 TO 1/4-28, SUPPLIED

RECOMMENDED MOUNTING PREPARATION: MODEL 6366
PREPARE MOUNTING SURFACE, Ø 1.25 [31.2] MIN, FLAT TO .001 TIR.
TAP 1/4-28 UNF-2B Ø .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.
## Model Number

7503D5

## PERFORMANCE SPECIFICATION

### TRIAXIAL VARIABLE CAPACITANCE ACCELEROMETER

This family also includes:

- VARIABLE CAPACITANCE TECHNOLOGY
- ±4V DIFFERENTIAL OUTPUT
- HERMETICALLY SEALED
- DC RESPONSE

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Range (g)</th>
<th>Frequency Response, ±3dB (Hz)</th>
<th>Sensitivity Differential, ±5% (mV/g)</th>
<th>Max Shock (0.1ms) g (peak)</th>
<th>Noise Differential (μg/√Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7503D1</td>
<td>±2</td>
<td>0-400</td>
<td>800</td>
<td>2000</td>
<td>10.5</td>
</tr>
<tr>
<td>7503D2</td>
<td>±5</td>
<td>0-800</td>
<td>800</td>
<td>2000</td>
<td>12</td>
</tr>
<tr>
<td>7503D3</td>
<td>±10</td>
<td>0-1000</td>
<td>400</td>
<td>2000</td>
<td>18</td>
</tr>
<tr>
<td>7503D4</td>
<td>±25</td>
<td>0-1500</td>
<td>160</td>
<td>2000</td>
<td>44</td>
</tr>
<tr>
<td>7503D5</td>
<td>±100</td>
<td>0-2500</td>
<td>40</td>
<td>2000</td>
<td>122</td>
</tr>
<tr>
<td>7503D7</td>
<td>±200</td>
<td>0-5000</td>
<td>20</td>
<td>2000</td>
<td>280</td>
</tr>
<tr>
<td>7503D8</td>
<td>±400</td>
<td>0-4000</td>
<td>10</td>
<td>2000</td>
<td>400</td>
</tr>
<tr>
<td>7503D9</td>
<td>±(X&amp;Y), ±25(Z)</td>
<td>0-800(X&amp;Y), 0-1500(Z)</td>
<td>800(X&amp;Y), 160(Z)</td>
<td>2000</td>
<td>12(X&amp;Y), 44(Z)</td>
</tr>
<tr>
<td>7503D10</td>
<td>±(X&amp;Y), ±50(Z)</td>
<td>0-800(X&amp;Y), 0-2700(Z)</td>
<td>800(X&amp;Y), 80(Z)</td>
<td>2000</td>
<td>12(X&amp;Y), 89(Z)</td>
</tr>
</tbody>
</table>

Refer to the performance specifications of the products in this family for detailed description.

### PHYSICAL

- Weight, Max: ±1.3 oz (38 grams)

### PERFORMANCE

- Frequency Response (±5%) 0 - 1700 Hz
- Frequency Response (±3dB) 0 - 2700 Hz
- Resonant Frequency >3000 Hz
- Sensitivity Differential, ±5% [1] 80 mV/g
- Output Noise, Differential, Typ 69 μg/m/s²
- Non-Linearity, Max [2] 0.5 % F.S
- Cross Axis Sensitivity, Max 3 %
- Scale Factor Calibration Error, Max 1 %
- Zero Measured Output ±50 mV

### ENVIRONMENTAL

- Maximum Mechanical Shock (0.1 ms) ±2000 gpk
- Bias Temperature Shift [Max 3] ±100 ppm/(°F) / °F
- Operating Temperature Range [4] -67 to +257 °F / -55 to +125 °C
- Scale Factor Temperature Shift [3] ±111 ppm/F / ±200 °F/°C

### ELECTRICAL

- Output Common Mode Voltage, Typ 2.5 VDC
- Output Impedance <10kΩ
- Operating Voltage ±6 to ±33 VDC
- Operating Current (AOP, BACON open), Max 35 mA DC
- Power Supply Rejection Ratio >95 dB
- Ground Isolation >30 MoΩ

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Units on the line drawing are in inches. Refer to 127-7503D for more information.