5. MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERIOR 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.

MARKING DENOTES LOCATION OF SENSING ELEMENT'S CENTER OF MASS

MATES WITH DYTRAN 6964AXX CABLE (XX DENOTES LENGTH IN FT)

2. WEIGHT: 38 GRAMS, MAX.

1. MATERIAL: TITANIUM ALLOY.

NOTES: UNLESS OTHERWISE SPECIFIED


REMOVE BURRS. COUNTERSINK INTERNAL THDS 90' TO MAJOR DIA.

CHAM 45' TO MINOR DIA. THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS, DIMENSIONS APPLY AFTER FINISHING.

BREAK SHARP EDGES .005 TO .010 MANUFACTURING TOLERANCE .005.

MACHINED FLATTEN .003.

WELDING SYMBOLS PER AWS D1.1.

ABBREVIATIONS PER MIL-STD-12.

UNLESS OTHERWISE SPECIFIED: DRAWING IS NOT TO BE SCALING DRAWING.
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 0.7-6s .20 [5.1] MIN.)
RECOMMENDED TORQUE 10-12 LB-IN. (1.12-1.35 N-m).

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

(1/4-28 UNF-2A)

STUD, MODEL 6691,
1/4-28 UNF-2A TO M6 X 1, 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 .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.

RECOMMENDED MOUNTING PREPARATION: MODEL 6691
PREPARE MOUNTING SURFACE, Ø 1.25 [31.2] MIN. FLAT TO .001 TIR.
TAP M6 X 1 .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.
### 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 (μV/√Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7503D1</td>
<td>±2</td>
<td>0-400</td>
<td>2,000</td>
<td>2000</td>
<td>7</td>
</tr>
<tr>
<td>7503D2</td>
<td>±10</td>
<td>0-1000</td>
<td>400</td>
<td>5000</td>
<td>18</td>
</tr>
<tr>
<td>7503D3</td>
<td>±25</td>
<td>0-1400</td>
<td>160</td>
<td>5000</td>
<td>25</td>
</tr>
<tr>
<td>7503D4</td>
<td>±50</td>
<td>0-2000</td>
<td>800</td>
<td>5000</td>
<td>100</td>
</tr>
<tr>
<td>7503D5</td>
<td>±100</td>
<td>0-2500</td>
<td>400</td>
<td>5000</td>
<td>100</td>
</tr>
<tr>
<td>7503D6</td>
<td>±200</td>
<td>0-3000</td>
<td>20</td>
<td>5000</td>
<td>200</td>
</tr>
<tr>
<td>7503D7</td>
<td>±400</td>
<td>0-4000</td>
<td>10</td>
<td>5000</td>
<td>400</td>
</tr>
<tr>
<td>7503D8</td>
<td>±50±X&amp;Y, ±25(Z)</td>
<td>0-500 (X&amp;Y), 0-1400 (Z)</td>
<td>800 (X&amp;Y), 160 (Z)</td>
<td>2000</td>
<td>12 (X&amp;Y), 25 (Z)</td>
</tr>
<tr>
<td>7503D9</td>
<td>±50±X&amp;Y, ±25(Z)</td>
<td>0-500 (X&amp;Y), 0-2000 (Z)</td>
<td>800 (X&amp;Y), 80 (Z)</td>
<td>2000</td>
<td>12 (X&amp;Y), 50 (Z)</td>
</tr>
</tbody>
</table>

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

#### PHYSICAL

<table>
<thead>
<tr>
<th>Supplied Accessories:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Accredited calibration certificate (ISO 17025)</td>
</tr>
<tr>
<td>2) Mounting stud, Model 6360, 1/4-28 UNF-2A, Qty 1</td>
</tr>
<tr>
<td>3) Mounting stud, Model 6691, 1/4-28 UNF-2A to M6 X 1, Qty 1</td>
</tr>
<tr>
<td>4) Mounting screws, Model 6753A1, 8-32 x 1.0, Qty. 2</td>
</tr>
<tr>
<td>5) Mounting screws, Model 6687A1, M4x0.7 x 25mm, Qty. 2</td>
</tr>
<tr>
<td>6) Flat washers, Model 6754, Qty. 2</td>
</tr>
</tbody>
</table>

#### Notes:

1) Single ended sensitivity is half of values shown. (Ref. at 100 Hz)
2) -90% to +90% of Full Scale.
3) Over the rated temperature range.
4) In the interest of constant product improvement, we reserve the right to change specifications without notice.

#### ENVIRONMENTAL

- Maximum Mechanical Shock (0.1 ms) ±2000 gpk ±19620 m/s² peak
- Bias Temperature Shift, Max [3] 111 ppm/°F 200 ppm/°C
- Bias Calibration Error, Max 0.5 % of span
- Operating Temperature Range -67 to +257 °F -55 to +125 °C
- Scale Factor Temperature Shift [3] -111 to +111 ppm/°F -200 to +200 ppm/°C
- Seal Hermetic

#### ELECTRICAL

- Output Common Mode Voltage, Typ ±2.5 VDC ±2.5 VDC
- Output Impedance <10k Ω <10k Ω
- Operating Voltage +9 to +35 VDC +9 to +36 VDC
- Operating Current (AOP &AON open), Max 35 mA Dc 35 mA Dc
- Power Supply Rejection Ratio >65 dB >65 dB
- Ground Isolation >30 M Ω >30 M Ω

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