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)

WEIGHT: 38 GRAMS, MAX.

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 UNF-2B .200 [5.1] MIN. (OR 2X M4 X 0.7-6H .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)

(M6 X 1)

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 .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 .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.

SYSTRAN

OUTLINE/INSTALLATION DWG,
TRIAXIAL DC ACCELEROMETER,
7503D SERIES

SCALE: 2:1
SHEET 2 OF 2

REV D

MASTER DRAWING
IN RED

TITLE
OUTLINE/INSTALLATION DWG,
TRIAXIAL DC ACCELEROMETER,
7503D SERIES

SIZE: B
CAGE CODE: 2W033
DWG NO: 127-7503D
REV: D

127-7503D REV B
**VARIABLE CAPACITANCE TECHNOLOGY**

- ± 4V DIFFERENTIAL OUTPUT
- HERMETICALLY SEALED
- DC RESPONSE

### PERFORMANCE SPECIFICATION

<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>2,000</td>
<td>2000</td>
<td>7</td>
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<tr>
<td>7503D2</td>
<td>±5</td>
<td>0-500</td>
<td>80</td>
<td>500</td>
<td>12</td>
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<tr>
<td>7503D3</td>
<td>±10</td>
<td>0-1000</td>
<td>400</td>
<td>5000</td>
<td>18</td>
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<tr>
<td>7503D4</td>
<td>±25</td>
<td>0-1400</td>
<td>160</td>
<td>500</td>
<td>25</td>
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<tr>
<td>7503D5</td>
<td>±50</td>
<td>0-2000</td>
<td>80</td>
<td>500</td>
<td>50</td>
</tr>
<tr>
<td>7503D6</td>
<td>±100</td>
<td>0-2500</td>
<td>40</td>
<td>5000</td>
<td>100</td>
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<tr>
<td>7503D7</td>
<td>±200</td>
<td>0-3000</td>
<td>20</td>
<td>5000</td>
<td>200</td>
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<tr>
<td>7503D8</td>
<td>±5(X&amp;Y), ±25(Z)</td>
<td>0-500(X&amp;Y), 0-1400(Z)</td>
<td>800(X&amp;Y), 1600(Z)</td>
<td>2000</td>
<td>12(X&amp;Y), 25(Z)</td>
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<tr>
<td>7503D9</td>
<td>±5(X&amp;Y), ±50(Z)</td>
<td>0-500(X&amp;Y), 0-2000(Z)</td>
<td>800(X&amp;Y), 800(Z)</td>
<td>2000</td>
<td>12(X&amp;Y), 50(Z)</td>
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</table>

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

### PHYSICAL

<table>
<thead>
<tr>
<th>Weight, Max</th>
<th>oz</th>
<th>grams</th>
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<tbody>
<tr>
<td>1.3</td>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>Connector Type</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-pin, 5/16-32 UNEF-2A</td>
<td>Titanium Alloy</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensing Technology</th>
<th>MEMS</th>
</tr>
</thead>
</table>

### PERFORMANCE

- **Input Range:** ±400 g
- **Frequency Response (±5%):** 0 - 1600 Hz
- **Frequency Response (±3dB):** 0 - 4000 Hz
- **Resonant Frequency:** >3000 Hz
- **Sensitivity Differential, ±5% [1]:** 10 mV/g
- **Output Noise, Differential, Typ:** 400 μg rms/v Hz
- **Cross Axis Sensitivity, Max:** 3 % F.S
- **Scale Factor Calibration Error, Max:** 1 %
- **Zero Measured Output:** ±50 mV

### ENVIRONMENTAL

- **Maximum Mechanical Shock (0.1 ms):** ±5000 gpk
- **Bias Temperature Shift, Max [3]:** ±111 ppm (ppm of span)/°F
- **Bias Calibration Error, Max:** 0.5 % of span
- **Operating Temperature Range:** -67 to +257 °C
- **Scale Factor Temperature Shift [3]:** -111 to +111 ppm/°F
- **Seal:** Hermetic

### ELECTRICAL

- **Output Common Mode Voltage, Typ:** ±2.5 VDC
- **Input impedance:** >10K Ω
- **Operating Voltage:** ±9 to +36 VDC
- **Operating Current (AOP &AON open), Max:** 35 mA Dc
- **Power Supply Rejection Ratio:** >85 dB
- **Ground Isolation:** >30 MO