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 6964XXX CABLE (XX DENOTES LENGTH IN FT)

1. MATERIAL: TITANIUM ALLOY.

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED:
- DRAWING SIZES: 1" = 1' 0" FOR MACHINED DIMENSIONS.
- UNFINISHED SURFACES: TOTAL ROUND-WEIGHT (TIR) OF 0.005" OR LESS.
- MACHINED FILLET RADIUS (RUS) TO 0.005".
- MACHINED FEATURES PER AMERICAN NATIONAL FORGE DIMENSIONS.
- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS APPLY AFTER FINISHING.
- HOLE TOLERANCES TO BE DETERMINED BY DIA WELDING SYMBOLS PER AWS 4.2.

ABBREVIATIONS PER MIL-STD-12.

DO NOT SCALE 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 0.7-6G .20 [5.1] MIN.)
RECOMMENDED TORQUE 10-12 LB-IN. (1.12-1.35 N-m).

1/4-28 UNF-2B

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.
<table>
<thead>
<tr>
<th>Model Number</th>
<th>7503D10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PERFORMANCE SPECIFICATION</strong></td>
<td></td>
</tr>
<tr>
<td><strong>TRIAXIAL VARIABLE CAPACITANCE ACCELEROMETER</strong></td>
<td></td>
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<tr>
<td>This family also includes:</td>
<td></td>
</tr>
<tr>
<td><strong>VARIABLE CAPACITANCE TECHNOLOGY</strong></td>
<td></td>
</tr>
<tr>
<td><strong>± 4V DIFFERENTIAL OUTPUT</strong></td>
<td></td>
</tr>
<tr>
<td><strong>HERMETICALLY SEALED</strong></td>
<td></td>
</tr>
<tr>
<td><strong>DC RESPONSE</strong></td>
<td></td>
</tr>
</tbody>
</table>

### PERFORMANCE

<table>
<thead>
<tr>
<th>Physical</th>
<th>ENGLISH</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight, Max</td>
<td>1.3 oz</td>
<td>38 grams</td>
</tr>
<tr>
<td>Connector Type</td>
<td>9-pin, 5/16-32 UNEF-2A</td>
<td>9-pin, 5/16-32 UNEF-2A</td>
</tr>
<tr>
<td>Material</td>
<td>Titanium Alloy</td>
<td>Titanium Alloy</td>
</tr>
</tbody>
</table>

| Sensing Technology | MEMS | MEMS |

### Physical

- **Weight, Max**: 1.3 oz (38 grams)
- **Connector Type**: 9-pin, 5/16-32 UNEF-2A (9-pin, 5/16-32 UNEF-2A)
- **Material**: Titanium Alloy (Titanium Alloy)
- **Sensing Technology**: MEMS (MEMS) MEMS

### Output

- **Input Range**: ±5 g (±49.1 m/s²)
- **Frequency Response (±5%)**: ±50 Hz (±490.5 m/s²)
- **Sensitivity Differential, ±5% [1]**: 800 mV/g (82 mV/ms²)
- **Output Noise, Differential, Typ**: 12 μg m/s²/√Hz (118 μV/√Hz)
- **Non-Linearity, Max [2]**: 0.5 % F.S
- **Scale Factor Calibration Error, Max.**: 1 %
- **Zero Measured Output**: ±50 mV

### Environmental

- **Maximum Mechanical Shock (0.1 ms)**: ±2000 gpk (±19620 m/s² peak)
- **Bias Temperature Shift ,Max [3]**: 111 ppm of span/F (200 ppm of span/°C)
- **Bias Calibration Error, Max.**: 0.5 % of span
- **Operating Temperature Range**: 0°F to +257°F (-55 to +125°C)
- **Scale Factor Temperature Shift [3]**: -111 to +111 ppm/F (200 ppm/°C)
- **Seal**: Hermetic

### Electrical

- **Output Common Mode Voltage, Typ**: ±2.5 VDC
- **Output Impedance**: <10K Ω
- **Output Voltage**: ±5V DC
- **Operating Voltage**: ±9 to +36 VDC
- **Operating Current (AOP &AON open)**: 35 mA DC
- **Power Supply Rejection Ratio**: >60 dB
- **Ground Isolation**: >30 MO

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For more information, refer to 127-7503D.