

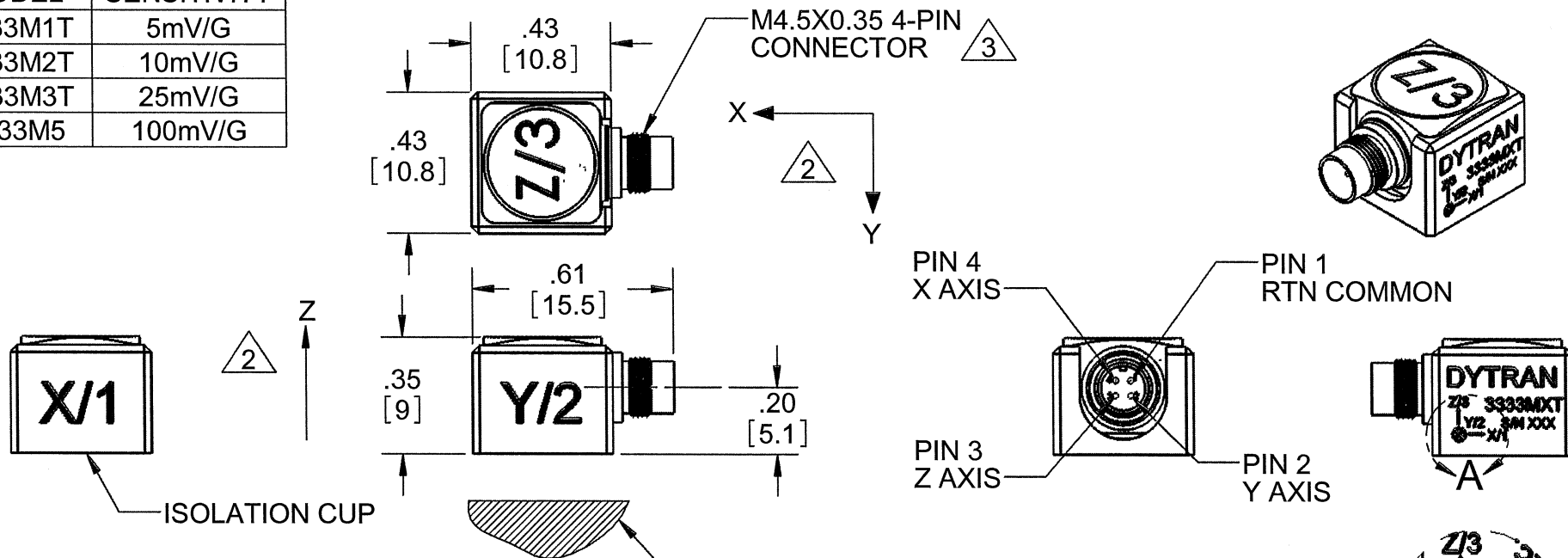
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REVISIONS

| REV | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
|-----|------|---------------------------|-------------|-----|------|
| C | 9198 | INITIAL RELEASE OF 3333M5 | AB 09/25/12 | 41 | A5 |

| MODEL | SENSITIVITY |
|---------|-------------|
| 3333M1T | 5mV/G |
| 3333M2T | 10mV/G |
| 3333M3T | 25mV/G |
| 3333M5 | 100mV/G |



MOUNTING RECOMMENDATIONS

PREPARE A SURFACE AT LEAST .50 BY .50. SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .001 TIR. USE ONE DROP OF CYANOACRYLATE TO MOUNT THE ACCELEROMETER.

**DETAIL A
SCALE 4 : 1**

4. HOUSING/CONNECTOR MATERIAL: TITANIUM
ISOLATION CUP: ALUMINUM ALLOY 6061-T6, BLACK ANODIZED

3 MATES WITH 6893AXX CABLE

2 ARROWS INDICATE DIRECTIONS OF ACCELERATION FOR POSITIVE OUTPUT

1. WEIGHT: 2.8 GRAMS

NOTES: UNLESS OTHERWISE SPECIFIED

| | |
|--|-----------|
| UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER ASME Y14.5M - 1994. REMOVE BURRS. COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA. CHAM EXT THDS 45° TO MINOR DIA. THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS. THDS PER MIL-S-7742. DIMENSIONS APPLY AFTER FINISHING. | |
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE: INCHES METRIC ANGLES .XX ± .03 .X ± 0.8 ± 1° .XXX ± .010 .XX ± 0.25 | |
| USED ON | NEXT ASSY |
| APPLICATION | |
| THIRD ANGLE PROJECTION | |
| | |
| ALL MACHINED SURFACES. TOTAL RUNOUT WITHIN .005. BREAK SHARP EDGES .005 TO .010. MACHINED FILLET RADII .005 TO .015. WELDING SYMBOLS PER AWS A2.4. ABBREVIATIONS PER MIL-STD-12. | |

| | |
|----------------------|--|
| MATERIAL | |
| FINISH | |
| DO NOT SCALE DRAWING | |

CONTRACT NO.


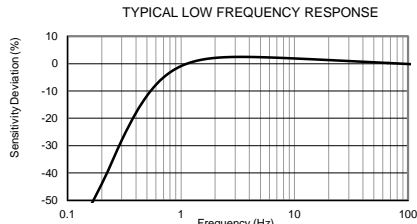
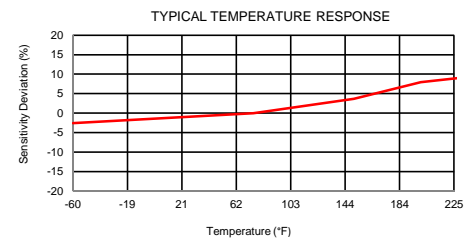
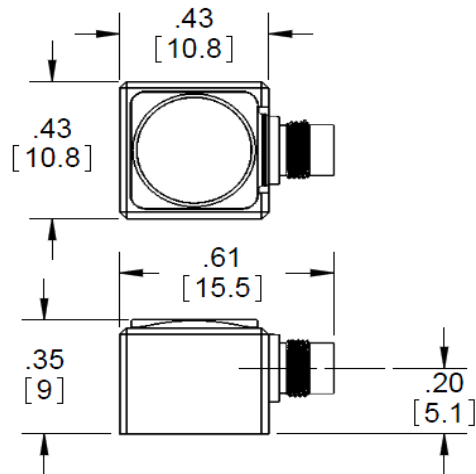
| APPROVALS | | DATE |
|-----------|----|----------|
| ORIG | RA | 03/30/11 |
| CHK | JS | 06/01/11 |
| APP | DV | 06/16/11 |
| APP | | |




TITLE:

**OUTLINE/INSTALLATION
DRAWING, 3333MT SERIES**

| SIZE | CAGE CODE | DWG. NO. | REV |
|------------|-----------|------------|--------------|
| A | 2W033 | 127-3333MT | C |
| SCALE: 2:1 | | SOLIDWORKS | SHEET 1 OF 1 |

| MODEL NUMBER 3333M1T | | PERFORMANCE SPECIFICATION | | | | DOC NO PS3333M1T | | | | | | | | | | | | | | | | | | | |
|---|--------------------|--|-------------------|-------------------|-------------------------------|---|--|-------|--------------------|---------------|-------------------|----------------|---------------------|---------|----|-----|--------|-------------|-----------|---------|----|-----|--------|-------------|-----------|
| | | Accelerometer, Triaxial, IEPE | | | | REV B, ECN 12879, 08/12/16 | | | | | | | | | | | | | | | | | | | |
|  | | <ul style="list-style-type: none">• ULTRA LOW FREQUENCY RESPONSE• ULTRA LOW NOISE LEVEL• CASE ISOLATED | | | | This family also includes: <table><tr><th>Model</th><th>Sensitivity (mV/g)</th><th>Range (Gpeak)</th><th>Resolution (Grms)</th><th>Oper. Temp(*F)</th><th>Time Constant (sec)</th></tr><tr><td>3333M2T</td><td>10</td><td>500</td><td>0.0072</td><td>-60 to +225</td><td>0.5 - 1.5</td></tr><tr><td>3333M3T</td><td>25</td><td>200</td><td>0.0024</td><td>-60 to +225</td><td>0.5 - 1.5</td></tr></table> | | Model | Sensitivity (mV/g) | Range (Gpeak) | Resolution (Grms) | Oper. Temp(*F) | Time Constant (sec) | 3333M2T | 10 | 500 | 0.0072 | -60 to +225 | 0.5 - 1.5 | 3333M3T | 25 | 200 | 0.0024 | -60 to +225 | 0.5 - 1.5 |
| Model | Sensitivity (mV/g) | Range (Gpeak) | Resolution (Grms) | Oper. Temp(*F) | Time Constant (sec) | | | | | | | | | | | | | | | | | | | | |
| 3333M2T | 10 | 500 | 0.0072 | -60 to +225 | 0.5 - 1.5 | | | | | | | | | | | | | | | | | | | | |
| 3333M3T | 25 | 200 | 0.0024 | -60 to +225 | 0.5 - 1.5 | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Refer to the performance specifications of the products in this family for detailed description. | | | | | | | | | | | | | | | | | | | |
| | | | | | | Supplied Accessories: 1) Accredited calibration certificate (ISO 17025) | | | | | | | | | | | | | | | | | | | |
| | | | | | | Notes: [1] M4.5 X 0.35 Connector. Mates with Dytran cable Model 6893AXX. [2] Measured at 100Hz, 5 Grms per ISA RP 37.2. [3] Measured using zero-based straight line method, percentage of F.S. or any lesser range. [4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier. [5] TEDS operational temperature -40°C to +85°C | | | | | | | | | | | | | | | | | | | |
| PHYSICAL | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight, Max | | 0.14 | oz | 4.0 | grams | | | | | | | | | | | | | | | | | | | | |
| Mounting | | Adhesive | | Adhesive | | | | | | | | | | | | | | | | | | | | | |
| Connector [1] | Type | 4-pin | | 4-pin | | | | | | | | | | | | | | | | | | | | | |
| | Material | Ti-6 AL-4V | | Ti-6 AL-4V | | | | | | | | | | | | | | | | | | | | | |
| Housing | Material | Ti-6 AL-4V | | Ti-6 AL-4V | | | | | | | | | | | | | | | | | | | | | |
| Isolation Cup | Material | Anodized Aluminum | | Anodized Aluminum | | | | | | | | | | | | | | | | | | | | | |
| Sensing Element | Material | Ceramic | | Ceramic | | | | | | | | | | | | | | | | | | | | | |
| | Mode | Shear | | Shear | | | | | | | | | | | | | | | | | | | | | |
| PERFORMANCE | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sensitivity, +15-10% [2] | | 5 | mV/g | 0.51 | mV/m/s ² | | | | | | | | | | | | | | | | | | | | |
| Acceleration Range, | | +/-1000 | Gpeak | +/- 9810 | m/s ² peak | | | | | | | | | | | | | | | | | | | | |
| Frequency Range, +15/-10% | | .65-10,000 | Hz | .65-10,000 | Hz | | | | | | | | | | | | | | | | | | | | |
| Resonance Frequency | | >24 | kHz | >24 | kHz | | | | | | | | | | | | | | | | | | | | |
| Linearity [3] | | 1 | %F.S. | 1 | %F.S. | | | | | | | | | | | | | | | | | | | | |
| Transverse Sensitivity Max | | 6 | % | 6 | % | | | | | | | | | | | | | | | | | | | | |
| Noise floor | | 0.0072 | Grms | 0.071 | m/s ² rms | | | | | | | | | | | | | | | | | | | | |
| Spectral Noise | 1Hz | 1258 | μGrms/sqr(Hz) | 12341 | μm/s ² rms/sqr(Hz) | | | | | | | | | | | | | | | | | | | | |
| | 10Hz | 220 | μGrms/sqr(Hz) | 2158 | μm/s ² rms/sqr(Hz) | | | | | | | | | | | | | | | | | | | | |
| | 100Hz | 134 | μGrms/sqr(Hz) | 1315 | μm/s ² rms/sqr(Hz) | | | | | | | | | | | | | | | | | | | | |
| | 1000Hz | 62 | μGrms/sqr(Hz) | 608 | μm/s ² rms/sqr(Hz) | | | | | | | | | | | | | | | | | | | | |
| | 10000Hz | 32 | μGrms/sqr(Hz) | 314 | μm/s ² rms/sqr(Hz) | | | | | | | | | | | | | | | | | | | | |
| ENVIRONMENTAL | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shock Max | | 5000 | g pk | 49050 | m/s ² | | | | | | | | | | | | | | | | | | | | |
| Vibration Max | | 3000 | g pk | 29430 | m/s ² | | | | | | | | | | | | | | | | | | | | |
| Operating Temperature | | -60 to +225 | °F | -51 to +107 | °C | | | | | | | | | | | | | | | | | | | | |
| TEDS Operating Temperature | | -40 to +185 | °F | -40 to +85 | °C | | | | | | | | | | | | | | | | | | | | |
| Seal | | Hermetic | | Hermetic | | | | | | | | | | | | | | | | | | | | | |
| Base Strain Sensitivity | | 0.02 | g/με | 0.20 | m/s ² /με | | | | | | | | | | | | | | | | | | | | |
| ELECTRICAL | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supply Current Range [4] | | 2 to 20 | mA | 2 to 20 | mA | | | | | | | | | | | | | | | | | | | | |
| Compliance Voltage Range | | +18 to +30 | VDC | +18 to +30 | VDC | | | | | | | | | | | | | | | | | | | | |
| Output Impedance, Typ. | | 100 | Ω | 100 | Ω | | | | | | | | | | | | | | | | | | | | |
| Output Bias Voltage | | 11 to 13 | VDC | 11 to 13 | VDC | | | | | | | | | | | | | | | | | | | | |
| Discharge Time Constant | | 0.5 -1.5 | sec | 0.5 -1.5 | sec | | | | | | | | | | | | | | | | | | | | |
| TEDS Feature [5] | | IEEE 1451.4 | | IEEE 1451.4 | | | | | | | | | | | | | | | | | | | | | |
| Case Isolation | | 10 | GΩ | 10 | GΩ | | | | | | | | | | | | | | | | | | | | |
| | | | | | |  | | | | | | | | | | | | | | | | | | | |
| | | | | | |  | | | | | | | | | | | | | | | | | | | |
| | | | | | |  | | | | | | | | | | | | | | | | | | | |
| | | | | | | Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3333MT for more information. | | | | | | | | | | | | | | | | | | | |



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