

| 2 | | | 1 | | | | |
|--|---------|-----------------|----------------------|------|---|--|--|
| EVISIONS | | | | | | | |
| PTION | | BY/DATE | СНК | APPR | | | |
| ELEASE | | NDC 09/29/15 | LN | RT | D | | |
| IOTE 5 | | KG 03/01/19 | DA | MH | | | |
| | | AN XT XXT | TRAN BAXT XXXX | | В | | |
| | | | | | | | |
| MASTER TRUMENTS, INC. ON SWOTH CAN RED JTLINE/ INSTALLATION DRAWING, 3153AT SERIES CAGE CODE DWG NO 2W033 DWG NO 127-3153A1T B | | | | | | | |
| 2:1 | <u></u> | | SHEET 1 | OF 1 | | | |
| | | 1 | | | | | |

| MODEL NUMBER | | PERFORMANCE SPECIFICATION | | | | | | | | DOC | NO. | |
|--|----------|-------------------------------|-----------------|---------------------------|----------------------|------------------|---------------------------|------------------------------|--|------------------------|-------------------|--|
| 3153A3T | | | | | | | | | | PS3153A3T | | |
| | | | | | Accelerometer, | Triaxial, IEPE | | | | REV C, ECN 15 | 508, 01/13/2020 | |
| | | | | | | This family a | also includes: | | | | | |
| 1 | | • HERMETICA | LLY SEA | LED | | Model | Sensitivity (mV/g) | Range (Gpeak) | Resolution (Grms) | Oper. Temp(°F) | TC (sec) | |
| | | STUD MOUN | TED | | | 3153A1T | 10 | 500 | 0.003 | -60 to +250 | 0.5 to 1.5 | |
| | | • TEDS FEATU | JRE | | | 3153A2T | 50 | 100 | 0.0006 | -60 to +250 | 0.5 to 1.5 | |
| GROUND ISOLATED | | | | | | | | | | | | |
| | | | | | | Refer to the p | performance specific | cations of the proc | lucts in this family for | detailed description | | |
| ENGLISH | | | | SI | | | | | | | | |
| PHYSICAL | | | | | | Supplied Ac | cessories: | | | | | |
| Weight, Max | | 1.23 | oz | 35 | grams | 1) Model 620 | 0 Mounting Stud | | | | | |
| Connector [1] | Туре | 4-pin, 3/8-28 | | 4-pin, 3/8-28 | | 2) Accredited | Calibration Certification | ate (ISO 17025) | | | | |
| | Material | 300 Series S.S. | | 300 Series S.S. | | Notes: | | | | | | |
| Housing Material | | 300 Series S.S. | | 300 Series S.S. | | | | r. Mates with Dytr | an cable Model 6390/ | XX, 6381AXX, 638 | 0AXX, & | |
| Sensing Element | | Ceramic | | Ceramic | | 60042AXX (X | (X=length in feet) | | | | | |
| | Mode | Shear | | Shear | | [2] Measured | At 100 Hz, 1 Grms | per ISA RP 37.2 | | | | |
| Mounting Provision | | 10-32 Tapped Hole | | 10-32 Tapped Hole | | [3] Linearity is | s % of specified full | scale (or any less | full-scale range), zer | o-based best fit stra | ight line methor | |
| | | | | | | | ply power to this dev | vice without curre | nt limiting, 20mA Max | , to do so will destro | y the integral IC | |
| PERFORMANCE | | | - | | | amplifier | | | | | | |
| Sensitivity, +15-10% [2] | | 100 | mV/g | 10.2 | mV/m/s ² | [5] In the inte | rest of constant pro | duct improvement | , we reserve the right | s to change the spe | cifications with | |
| Acceleration Range | | ± 50 | Gpeak | ±491 | m/s² peak | | | , | that a particular proc | | | |
| Frequency Range, ±5% | | 0.7 - 5000 | Hz | 0.7 - 5000 | Hz | | • | | r use in a particular a | • | • | |
| Resonance Frequency | | >20 | kHz | >20 | kHz | | | , , | erent applications and , must be validated for | | | |
| Linearity [3] | | 1 | %F.S. | 1 | %F.S. | | echnical experts. | spical parameters | | each customer ap | plication by the | |
| Transverse Sensitivity Max | | 6 | % | 6 | % | | | | TYPICA | L SENSITIVITY RESPON | SE OVER | |
| Electrical Noise Floor, Max. | | 0.0003 | Grms | 0.003 | m/s ² rms | | | | 15 | TEMPERATURE | | |
| | | | | | | | | | | | | |
| ELECTRICAL | | | | | | | | | 5 tion | | | |
| Supply Current Range [4] | | 2 to 20 | mA | 2 to 20 | mA | - | 1.22 | | 0 Deviation (%) | | | |
| Compliance Voltage Range | | +18 to +30 | VDC | +18 to +30 | VDC | | .59 [15] | | | | | |
| Output Impedance, Typ. | | 100 | Ω | 100 | Ω | - | [15] | CONNECTOR, 4 3/8-28 UN-2A | | | | |
| Output Bias Voltage | | 11 - 13 | VDC | 11 - 13 | VDC | | | / | ു -10 | | | |
| Discharge Time Constant | | 0.5 to 1.5 | sec | 0.5 to 1.5 | sec | .59 [15] | | C | -15 -100 -50 | 0 50 100 1 | 50 200 250 | |
| TEDS Feature | | IEEE 1451.4 | | IEEE 1451.4 | | | | | -100 -50 | Temperature (°F) | 30 200 230 | |
| | | | | | | | | | | AL LOW FREQUENCY RI | ESPONSE | |
| Shock Max | | . 4000 | | . 0040 | m/s ² | | | | - | | | |
| Vibration Max | | ± 1000 ± 250 | g pk | ± 9810 ± 2453 | m/s ² | .68 | | <u>t</u> | | | | |
| Operating Temperature | | ± 250 -60 to +250 | g pk °F | | °C | | | .39 [9.8] | -10 | | | |
| | | -60 to +250 -40 to +185 | °F | -51 to +121 -40 to +85 | °C | | | 4 | entry 10 (%) entry (%) ent | | | |
| TEDS Operating Temperature Seal | | -40 to +185 Hermetic | | -40 to +85 Hermetic | C | 10-32 UNF-2B | | | a ≩ -30 | | | |
| Seai Magnetic Sensitivity at 100 Gaus | 6 | 0.00007 | a/Gausa | 0.0006867 | m/s²/Gauss | | | | it -40 | | | |
| Base Strain Sensitivity at 100 Gaus | 3 | 0.0007 | g/Gauss g/με | 0.0006867 | m/s²/με | | | | ية 50 | | | |
| Electrical Isolation | | 10 | g/με MΩ | 10 | MΩ | | | | -50 | 1 Frequency (Hz) |) 100 | |
| | | 10 | | 10 | | | | | | Frequency (HZ) | | |

INSTRUMENTS, INC.

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