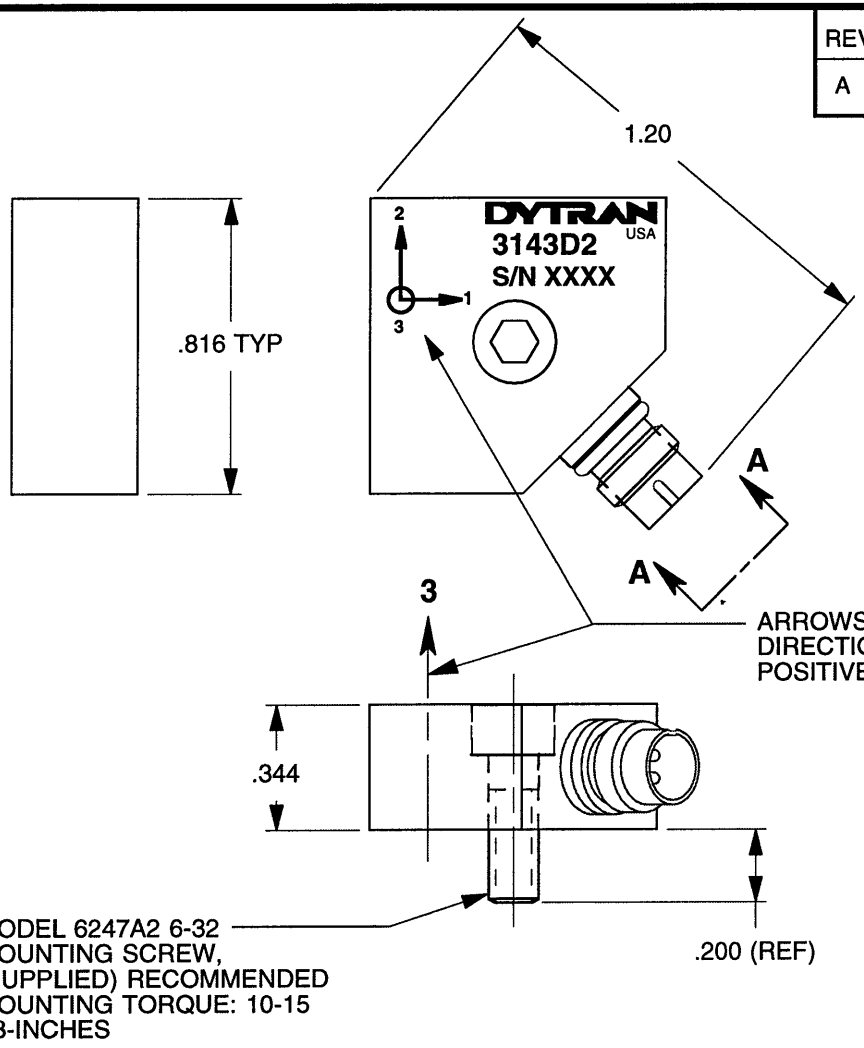
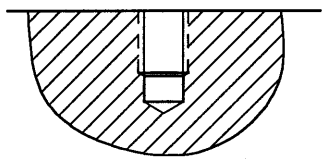
| REV | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
|---|---|---|---|---|---|
| A | 5436 | INITIAL RELEASE | RLA 8/29/08 | DV | DV |





*VIEW A-A LOOKING INTO CONNECTOR WITH CABLE DISCONNECTED*

**PINOUT**
PIN #1 GND RETURN, COMMON
PIN #2 SIG/PWR AXIS 2 (Y)
PIN #3 SIG/PWR AXIS 3 (Z)
PIN #4 SIG/PWR AXIS 1 (X)



MOUNTING PORT PREPARATION: DRILL #36 (Ø .1065) X .270 DEEP TAP 6-32 UNC-2B X .22 DEEP, MIN.

5. RECOMMENDED CABLES: MODEL 6041CXX, FOR CONNECTION TO DYTRAN POWER UNITS 4113B AND 4103C. MODEL 6811AXX FOR CONNECTION TO MODEL 4114B FOUR-CHANNEL POWER UNIT.
4. WEIGHT: 14 GRAMS.
3. SIGNAL GROUND IS INSULATED FROM CASE GROUND.
2. ENVIRONMENTAL SEAL: HERMETIC.
1. HOUSING/CONNECTOR MATERIAL: TITANIUM.

**EXCEPT AS OTHERWISE NOTED**

ALL DIMENSIONS IN INCHES
TOLERANCE: .XXX = ± .XX= ± .01

SURFACE FINISH EXCEPT AS NOTED √

BREAK EDGES TO DEBURR RADIUS OR CHAMFER

△ THESE DIAS ⊙ TO T.I.R.

FILLETS - MAX RAD.

DYTRAN INSTRUMENTS, INC.

MASTER
ONLY IF IN RED

CHATSWORTH, CA.

| | | | | | |
|---|---|---|---|---|---|
| SCALE 2X | REV - | DATE SEE REV BLK | ECN - | | |
| DATE 4/2/02 | PART NO. MODEL 3143D2 | | | | |
| DRAWN N.C. | CHECKED DV | MAT'L | | | |
| APPROVED DV 8/29/08 | NEXT ASSEMBLY | USED ON 3143D2 | | | |

TITLE
**OUTLINE/INSTALLATION DRAWING, MODEL 3143D2, 50 mV/G**

DWG NO. **127-3143D2**

SHEET 1 OF 1

# SPECIFICATIONS
# MODEL 3143D2 TRIAXIAL LIVM ACCELEROMETER

| SPECIFICATION | VALUE | UNITS |
|---|---|---|
| **PHYSICAL** | | |
| WEIGHT | 14 | Grams |
| SIZE, L X W X H | .82 x .82 x .34 | Inches |
| MOUNTING PROVISION, THRU HOLE | 6-32 MOUNTING SCREW | |
| CONNECTOR, RADIALLY MOUNTED | 4-PIN | |
| MATERIAL, HOUSING & CONNECTOR | TITANIUM | |
| ELEMENT TYPE | SHEAR MODE | |
| **PERFORMANCE** | | |
| SENSITIVITY, ± 5% [1] | 50 | mV/g |
| RANGE F.S. FOR ± 5 VOLTS OUTPUT | ± 250 | g's |
| FREQUENCY RANGE, ± 5% | 0.5 to 3000 | Hz |
| RESONANT FREQUENCY, NOM. | 25 | kHz |
| EQUIVALENT ELECTRICAL NOISE FLOOR | .0007 | g's RMS |
| LINEARITY [2] | ± 1% | % F.S. |
| TRANSVERSE SENSITIVITY, MAX. | 5 | % |
| STRAIN SENSITIVITY | .012 | g's/$\mu\sigma$ @ 250 $\mu\sigma$ |
| **ENVIRONMENTAL** | | |
| MAXIMUM VIBRATION/SHOCK | 600/1500 | ± g's/g's PEAK |
| TEMPERATURE RANGE, OPERATING | -60 to +250 | °F |
| TEMPERATURE RANGE, SURVIVAL | -100 TO +275 | °F |
| SEAL, (WELDED, GLASS-TO-METAL CONNECTOR) | HERMETIC | |
| COEFFICIENT OF THERMAL SENSITIVITY | .03 | %/°F |
| **ELECTRICAL** | | |
| SUPPLY CURRENT RANGE [3] | 2 to 20 | mA |
| COMPLIANCE VOLTAGE RANGE | +18 to +30 | VDC |
| OUTPUT IMPEDANCE, TYP. | 100 | Ohms |
| BIAS VOLTAGE, +12 VOLTS NOM. | +11 to +13 | VDC |
| DISCHARGE TIME CONSTANT, NOM. | 1 | Sec |
| OUTPUT SIGNAL POLARITY FOR ACCELERATION TOWARD TOP | | Positive |
| ELECTRICAL ISOLATION, CASE GROUND TO MOUNTING SURFACE | | 10 Megohms, min. |
| RECOMMENDED CABLES | 6041C (4-PIN CONNECTORS BOTH ENDS) | FOR USE WITH 4113B OR 4103C POWER UNITS |
| | 6811A (4-PIN CONNECTOR TO 3-BNC's | FOR USE WITH MULTI CHANNEL POWER UNITS AS MODEL 4114B |

Accessories supplied: (1) Model 6247A2 mounting screw.

[1] Measured at 100 Hz, 1 G RMS per ISA RP 37.2.
[2] Measured using zero-based best straight line method, % of F.S. or any lesser range.
[3] Do not apply power to this device without current limiting, 20 mA MAX. To do so will destroy the integral IC amplifier.