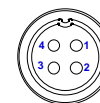


MOUNTING SURFACE



VIEW LOOKING INTO CONNECTOR

# PINOUT

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

CONNECTOR MATES WITH  
DYTRAN CABLE 6430AXX

4. MATERIAL, HOUSING AND CONNECTOR SHELL: TITANIUM ALLOY.
3. WEIGHT: 10 GMS.
2. SIG/PWR GROUND IS ISOLATED FROM CASE, 10 MEGOHMS, MIN.
1. ENVIRONMENTAL SEAL: HERMETIC.

| EXCEPT AS OTHERWISE NOTED |                |
|---------------------------|----------------|
| ALL DIMENSIONS IN INCHES  |                |
| TOLERANCE: .XXX = ± .005  | .XX = ± .01    |
| SURFACE FINISH            | 63 ✓           |
| EXCEPT AS NOTED           |                |
| BREAK EDGES TO DEBURR     | .005 MAX       |
| RADIUS OR CHAMFER         |                |
| THESE DIAS                | TO .002 T.I.R. |
| FILLETS                   | .003 MAX RAD.  |



CHATSORTH, CA.

|   |         |          |             |       |               |     |   |              |       |  |
|---|---------|----------|-------------|-------|---------------|-----|---|--------------|-------|--|
| SCALE   | 2X      | REV      | -           | DATE  | -             | ECN | - |              |       |  |
| DATE  | 8/11/00 | PART NO. | MODEL 3093B |       |               |     |   |              |       |  |
| DRAWN   | N.C.    | CHECKED  | R.A.        | MAT'L |               |     |   |              |       |  |
| APPROVED  |         |          |             |       | NEXT ASSEMBLY |     |   | USED ON      | 3093B |  |
| TITLE<br><br>OUTLINE/INSTALLATION DRAWING,<br>MODEL 3093B |         |          |             |       |               |     |   | DWG NO.      |       |  |
|   |         |          |             |       |               |     |   | 127-3093B    |       |  |
|   |         |          |             |       |               |     |   | SHEET 1 OF 1 |       |  |



## SPECIFICATIONS, MODEL 3093B TRIAXIAL ACCELEROMETER

| SPECIFICATIONS                                | VALUE  | UNITS   |
|---|--|---------|
| PHYSICAL                                      |  |         |
| WEIGHT  | 10.0   | GRAMS   |
| SIZE (HEIGHT x WIDTH x DEPTH)                 | 0.37 x .59 x .59   | INCHES  |
| MOUNTING                                      | ADHESIVE MOUNT   |         |
| CONNECTOR [1]                                 | 4-PIN [3]  |         |
| MATERIAL, HOUSING/CONNECTOR                   | TITANIUM ALLOY   |         |
| PERFORMANCE                                   |  |         |
| SENSITIVITY, +15 -10% [2]                     | 100  | mV/G    |
| RANGE, F.S. (each axis)                       | ± 50   | G       |
| FREQUENCY RESPONSE, ± 10 %                    | .6 to 5000   | Hz      |
| ELEMENT NATURAL FREQUENCY, NOM.               | 30   | kHz     |
| EQUIVALENT ELECTRICAL NOISE                   | .007   | G, RMS  |
| LINEARITY [3]                                 | 1  | %F.S.   |
| TRANSVERSE SENSITIVITY, MAX,                  | 5  | %       |
| SIGNAL POLARITY                               | POSITIVE FOR MOTION IN DIRECTION OF ARROWS ETCHED ON HOUSING |         |
| ENVIRONMENTAL                                 |  |         |
| MAXIMUM VIBRATION                             | ± 100  | G       |
| MAXIMUM SHOCK                                 | 500  | G       |
| TEMPERATURE RANGE                             | -60 to +250  | °F      |
| ENVIRONMENTAL SEAL                            | HERMETIC   |         |
| COEFFICIENT OF THERMAL SENSITIVITY            | .03  | %/°F    |
| ENVIRONMENTAL                                 |  |         |
| SUPPLY CURRENT RANGE, (each axis) [4]         | 2 to 20  | mA      |
| COMPLIANCE (SUPPLY) VOLTAGE RANGE (each axis) | +18 to +30   | VDC     |
| OUTPUT IMPEDANCE, TYP.                        | 100  | OHMS    |
| OUTPUT BIAS VOLTAGE, NOM.                     | +10  | VDC     |
| DISCHARGE TIME CONSTANT, NOM.                 | 0.5  | SEC     |
| GROUND ISOLATION [5]                          | 10, MIN.   | MEGOHMS |

### NOTES:

- [1] Connector mates with Dytran cable assy. Model 6430AXX. (XX = length in feet)
- [2] Reference sensitivity measured at 100 Hz, 1 G RMS per ISA RP 37.2
- [3] Linearity is % of specified full scale (or any lesser full-scale range), zero-based best fit straight-line method.
- [4] Power only with Dytran LIVM power unit or other Dytran-compatible constant current type power unit. If power is applied without current limiting protection, the internal amplifier will be immediately destroyed.
- [5] Case ground isolation is achieved by internal means.