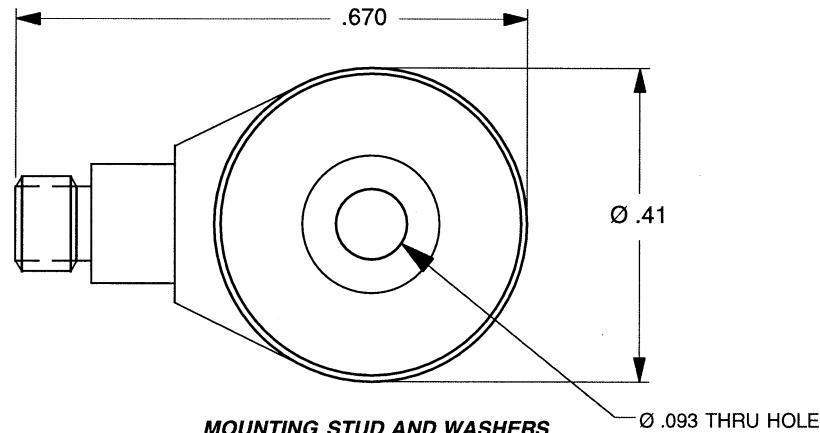


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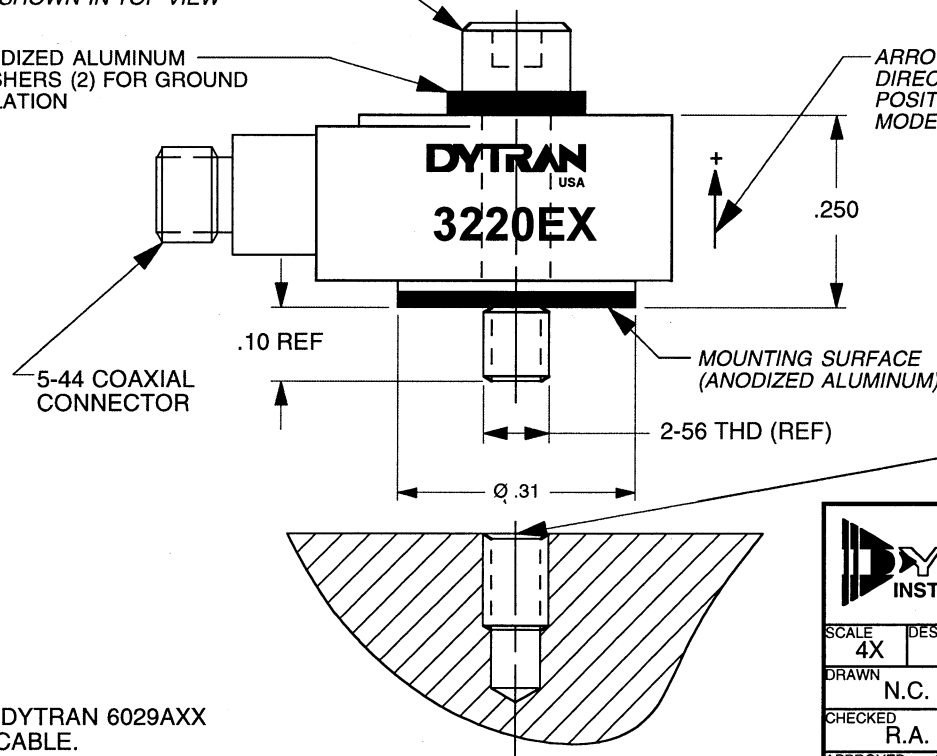
| REV | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
|-----|------|-------------|--------------|-----------|-----------|
| A | 5996 | SEE ECN | RA, 05/21/09 | <i>RA</i> | <i>RA</i> |



**MOUNTING STUD AND WASHERS
NOT SHOWN IN THIS VIEW**

MODEL 6165 MOUNTING SCREW
ASSY
(REMOVABLE)
NOT SHOWN IN TOP VIEW

ANODIZED ALUMINUM
WASHERS (2) FOR GROUND
ISOLATION



ARROW INDICATES SENSE AND
DIRECTION OF ACCELERATION FOR
POSITIVE GOING OUTPUT SIGNAL FOR
MODEL 3220E.

MOUNTING SURFACE PREPARATION

1. PREPARE (OR SELECT) A FLAT MOUNTIN SURFACE OF AT LEAST .32 DIAMETER. SURFACE SHOULD BE FLAT TO .001 TIR FOR BEST HIGH FREQUENCY RESPONSE.
2. AT THE CENTER, DRILL #50 (Ø .070) X .20 DEEP.
3. TAP #2-56 UNC-2B X .125 MIN DEPTH.
4. CLEAN THE AREA CAREFULLY AFTER MACHINING TO REMOVE ALL CHIPS AND CUTTING OILS.

3. MATES WITH DYTRAN 6029AXX OR 6040AXX CABLE.
2. HOUSING/CONNECTOR MATERIAL: TITANIUM
1. WEIGHT: 2.7 GRAMS APPROX.

NOTES: UNLESS OTHERWISE SPECIFIED.



**MASTER
ONLY IF IN RED**

CHATSWORTH, CA.

| | | | | | |
|--|-----------------|-------------------------|-----------------------------|--|--|
| SCALE 4X | DESIGN N.C. | DATE 7/19/02 | | | |
| DRAWN N.C. | DATE 7/19/02 | PART NO. MODEL 3220E | | | |
| CHECKED R.A. | DATE 7/19/02 | MAT'L | | | |
| APPROVED <i>RA</i> | DATE 5/26/09 | NEXT ASSEMBLY | USED ON MODEL 3220E | | |
| TITLE OUTLINE/INSTALLATION DRAWING MODEL 3220E MINIATURE ACCELEROMETER | | | DWG NO. 127-3220E | | |
| SHEET 1 OF 1 | | | | | |

SPECIFICATIONS
MODEL 3220E LIVM MINIATURE ACCELEROMETER

| SPECIFICATION | VALUE | UNITS |
|---|---------------------------------|------------------------------------|
| PHYSICAL | | |
| WEIGHT | 2.7 | Grams |
| SIZE, DIA X HEIGHT (SEE DWG 127-3220E) | .41 X .25 | IN |
| MOUNTING PROVISION | THRU HOLE FOR #2 MOUNTING SCREW | |
| MOUNTING SCREW, INSULATED (SUPPLIED) | 2-56 X .437 LONG | SS |
| CONNECTOR, RADIALLY MOUNTED | 5-44 | COAXIAL |
| MATERIAL, BASE, CAP & CONNECTOR | TITANIUM ALLOY | |
| ELEMENT TYPE | QUARTZ, PLANAR SHEAR | |
| PERFORMANCE | | |
| SENSITIVITY, $\pm 10\%$ [1] | 10 | mV/G |
| RANGE F.S. FOR ± 5 VOLTS OUTPUT | ± 500 | G's |
| FREQUENCY RESPONSE, $\pm 5\%$ | 1 to 5,000 | Hz |
| $\pm 15\%$ | .66 to 10,000 | Hz |
| NATURAL FREQUENCY, MOUNTED. | >33 | kHz |
| LINEARITY | 1 | %FS |
| TRANSVERSE SENSITIVITY, MAX. | 5 | % |
| STRAIN SENSITIVITY | .03 | G's/ $\mu\sigma$ @ 250 $\mu\sigma$ |
| RESOLUTION (EQUIVALENT ELECTRICAL NOISE) | .0032 | G's RMS |
| ENVIRONMENTAL | | |
| MAXIMUM VIBRATION/SHOCK | 1500/2000 | \pm G's/G's PEAK |
| TEMPERATURE RANGE | -60 to +250 | $^{\circ}$ F |
| SEAL, HERMETIC | Glass-to-metal and TIG welded | |
| COEFFICIENT OF THERMAL SENSITIVITY | | %/ F |
| ELECTRICAL | | |
| SUPPLY CURRENT/COMPLIANCE VOLTAGE RANGE [3] | 2 to 20/+18 to +30 | mA/Volts |
| OUTPUT IMPEDANCE, TYP. | 100 | Ohms |
| DISCHARGE TIME CONSTANT | 0.5 to .70 | Sec |
| OUTPUT BIAS VOLTAGE, NOM | 10 | VDC |
| OUTPUT SIGNAL POLARITY FOR ACCELERATION TOWARD TOP | | Positive |
| ELECTRICAL ISOLATION, CASE GROUND TO MOUNTING SURFACE | | 10 Gigaohms, min. |

ACCESSORIES PROVIDED: (1) MODEL 6165 MOUNTING SCREW ASSEMBLY. (INCLUDES MOUNTING SCREW AND 2 ANODIZED ALUMINUM WASHERS)

[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.