

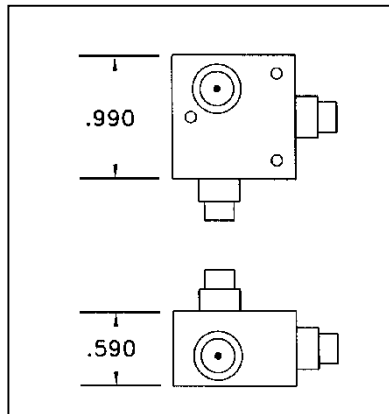
### \*3-Axis Vibration & Shock

### \*Sensitivity 10 pC/g

### \*Electrically Isolated

### \*Lightweight (42 Gm)

### \*3-Point Mounting



### Accessories Supplied:

- (3) Miniature Cable Assembly, LNHT-6"
- (3) #4-40 x 0.75"L Socket Head Cap Screws
- (1) Hardwood Storage Case
- (1) Standard Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.

The Model 521TX Triaxial Piezoelectric Accelerometer consists of three medium-sensitivity piezoelectric accelerometer elements orthogonally mounted in a machined anodized aluminum block. The unit is designed for medium level shock and vibration measurement work where a three-dimensional characterization of dynamic responses of a structure is required.

The unique design of the piezoelectric seismic system ensures that the sensor has no discernible spurious response to mounting torque, body strains, cable vibration, cable whip, pressure variations and most heat transients. The electrical isolation provided by the epoxy bonding permits accurate, repeatable measurements even in noisy industrial environments. The Model 521TX-HT is a high temperature version that will operate in environments up to +500 Deg. F. The units can be screw or adhesive mounted. *Consult the factory for customized versions of these sensors.*

### Specifications

521TX & 521TX-HT	
<b>Transfer / Electrical</b>	
Charge Sensitivity <sup>1</sup>	10 +/-2.5 pC/g
Capacitance	550 +/-50 pF
Frequency Linearity <sup>2</sup>	+/-5% Max 2 Hz To 5,000 Hz
Mounted Resonant Frequency	25 KHz, Nom.
Transverse Sensitivity	5% Max
Amplitude Linearity	+/-1.0% (BFSL)
Insulation Resistance	20,000 M Ohm Min, 50 VDC Test
Isolation Resistance	100M Ohm, Min.
<b>Environmental</b>	
Vibration Limit	1,000 g Max (Sine)
Shock Limit	2,000 g Max
Temperature Range	
Model 521TX	-100 To +350 Deg F (-73 To +175 Deg C)
Model 521TX-HT	-100 To +500 Deg F (-73 To +260 Deg C)
Humidity <sup>3</sup>	0 To 98% R.H. (Non-Condensing)
Base Strain Sensitivity	0.002 g/uE Equiv, Typical
Electromagnetic Sensitivity	0.01 g (Equiv / 100 Gauss)
Acoustic Sensitivity	0.01 g RMS (Equiv @ 150 dB SPL)
<b>Physical</b>	
Configuration	Single Ended Compression
Size	0.990 In. Sq. x 0.590 In. H (25.1 mm Sq x 15.0 mm H)
Weight	1.48 Oz (42 Gm)
Case Material	Stainless Steel / Aluminum Alloy
Electrical Interface	Coaxial 10-32 Thread
Mounting	(3) #4-40 Screws

### NOTES:

<sup>1</sup> At +75 Deg F, 10g Peak, 100Hz; Lower Frequency Limit is Determined by Associated Electronics

<sup>2</sup> Referenced to Sensitivity @ 100 Hz.

<sup>3</sup> With Connector Protected or Sealed, Unit is Epoxy Sealed