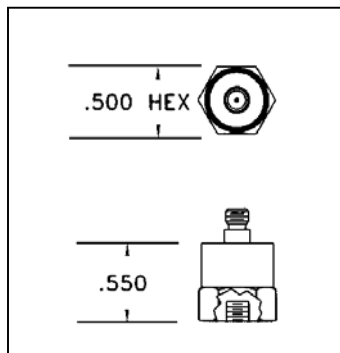
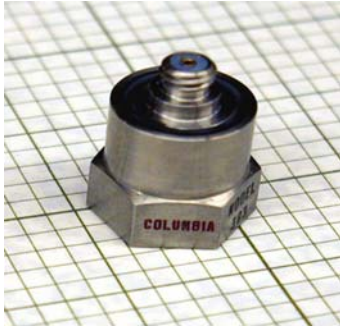


- \*High Shock To 20,000 G**
- \*Sensitivity 0.5 pC/g**
- \*High Resonant Frequency**
- \*Low Base Strain Sensitivity**
- \*Electrically Isolated**



The Model 383 Piezoelectric Accelerometer is specially designed to accurately measure high amplitude shock and vibration phenomena. The high resonant frequency of 80KHz results in minimum output distortion due to ringing when measuring impact transients with durations as low as 50 microseconds.

The Model 383 incorporates an advanced seismic system in which the sensing crystal is almost totally constrained and free from zero shift following high energy impacts. This accelerometer is not affected by transverse components of impact and is capable of measurements up to its rated value of 20,000 g's and even to 50,000 g's with stable operation. Its rugged construction ensures long life and high performance stability and repeatability. Internal electrical isolation minimizes ground loop problems from noise currents.

### Specifications

383	
<b>Transfer / Electrical</b>	
Charge Sensitivity <sup>1</sup>	0.5 pC/g Nominal 0.95 pC/g Maximum
Capacitance	325 +/-100 pF
Frequency Linearity <sup>2</sup>	+/-5% Max 2 Hz To 15,000 Hz
Mounted Resonant Frequency	80 KHz, Min.
Transverse Sensitivity	5% Max
Amplitude Linearity	+/-1.0% (BFSL)
Insulation Resistance	10,000 M Ohm Min, 50 VDC Test
Isolation Resistance	100M Ohm, Min.
<b>Environmental</b>	
Vibration Limit	1,000 g Max (Sine)
Shock Limit	20,000 g Max
Temperature Range	-65 To +350 Deg F (-54 To +175 Deg C)
Humidity <sup>3</sup>	0 To 95% R.H.
Base Strain Sensitivity	0.003 g/uE Equiv, Typical
Electromagnetic Sensitivity	0.005 g (Equiv / 100 Gauss)
Acoustic Sensitivity	0.005 g RMS (Equiv @ 150 dB SPL)
<b>Physical</b>	
Configuration	Ring Shear
Size	0.500 In. Hex x 0.550 In. H (12.7 mm Hex x 19.05 mm H)
Weight	0.28 Oz (8 Gm)
Case Material	18-8 Stainless Steel
Electrical Interface	Coaxial 10-32 Thread
Mounting	10-32 Tapped Base

### 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> Unit is Epoxy Sealed

### Accessories Supplied:

- (1) 10-32 x 0.375"L Mounting Stud, St Stl
- (1) Hardwood Storage Case
- (1) Standard Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.