

TCA110 Series

Test and Measurement Accelerometer, Side Exit 10-32 Coaxial Connector,
10-32 Mounting, 10 mV/g, $\pm 10\%$



TEST & MEASUREMENT PRODUCTS



Product Features

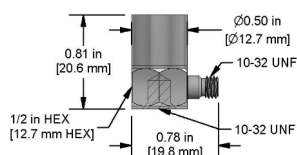
General Purpose Test & Measurement Accelerometer

- ▶ Lightweight Titanium Case
- ▶ 10kHz ($\pm 5\%$) Frequency Response
- ▶ Packaged in a Complimentary Protective Storage Case

TCA110

Coaxial Connector

Connector Pin	Polarity
Center	(+) Signal/Power
Shell	(-) Common



Stock Product

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	TCA110	M/TCA110	<u>Environmental</u>		
Sensitivity ($\pm 10\%$)	10 mV/g		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response ($\pm 3\text{dB}$)	30-1,800,000 CPM	0.5 Hz-30 kHz	Maximum Shock Protection	10,000 g, peak	
Frequency Response ($\pm 10\%$)	30-900,000 CPM	0.5 Hz-15 kHz	Electromagnetic Sensitivity	CE (Pending)	
Frequency Response ($\pm 5\%$)	30-600,000 CPM	0.5 Hz-10 kHz	Sealing	Welded	
Dynamic Range	$\pm 500\text{g}$, peak		<u>Physical</u>		
Non-Linearity	$\leq 1\%$		Sensing Element	PZT Ceramic	
Transverse Sensitivity	$\leq 5\%$		Sensing Structure	Shear Mode	
<u>Electrical</u>			Weight	0.35 oz	10 grams
Settling Time	< 2 Seconds		Case Material	Titanium	
Voltage Source	18-30 VDC		Mounting Thread	10-32 UNF	
Constant Current Excitation	2-10 mA		Connector (Non-Integral)	10-32	
Spectral Noise @ 10 Hz	100 $\mu\text{g}/\sqrt{\text{Hz}}$		Resonant Frequency	2,640,000 CPM	44 kHz
Spectral Noise @ 100 Hz	19 $\mu\text{g}/\sqrt{\text{Hz}}$		Mounting Hardware Supplied	10-32 Stud	M5x.8 Adapter Stud
Spectral Noise @ 1000 Hz	5 $\mu\text{g}/\sqrt{\text{Hz}}$		Calibration Certificate	CA12 Step Calibration	
Output Impedance	< 100 ohm				
Bias Output Voltage	10-14 VDC				
Case Isolation	Case Ground				

Typical Frequency Response

