

# E250A–10 Accelerometer

## Description

- E250A–10 is a tiny structure, adhesive mounting piezoelectric accelerometer, its element is piezo-crystal in annular shear mode
- Long stability of sensitivity output
- Equipped with small gage, light weight hook-up wires
- Signal ground is isolated from the mounting surface by a ceramic mounting base

## Characteristics

- Low impedance output
- Adhesive mounting
- Light weight (0.6 grams)
- Wide bandwidth, high S/N
- Flexible cable

Dynamic Characteristics	
Range	$\pm 500g$
Sensitivity( $\pm 5\%$ )	10mV/g
Non-linearity	$\leq 1\%$
Amplitude Response( $\pm 1dB$ )	2 ~ 15,000Hz
Resonant frequency	80kHz
Transverse Sensitivity	$\leq 5\%$
Electrical Characteristics	
DC output bias voltage	+6.5 ~ 12.5Vdc
Output Resistance	$\leq 100\Omega$
Residual noise (2Hz ~ 25kHz)	0.0015 g rms
Grounding	Signal ground is isolated from ground by a mounting screw
Power Requirement	
Excitation voltage	+18 ~ +24Vdc
Supply current	+2 ~ +20mA
Warm-up time(to within 10% of final bias)	<3Sec
Environmental characteristics	
Working temperature	-55°C ~ +125°C
Vibration limit	1000 g pK
Shock limit	2000 g pK
Humidity	Epoxy sealed
Thermal transient Sensitivity	0.18g pk/°C
Base strain Sensitivity	0.0004g pK/ $\mu$ Strain
Electromagnetic sensitivity	0.0001g rms/gauss
Physical characteristics	
Weight	0.6grams
Case material	Anodized aluminum alloy case, beryllium copper lid, alumina mounting surface
Mounting	Flat surface provided for adhesive mounting

- Through the assessment of environmental test: Vibration, Shock, Acceleration, Electromagnetic compatibility, Temperature, Altitude, Temperature impact, Mould, Salt mist, Humidity and hot etc.