



SERIES 660

LOW COST, EMBEDDABLE ACCELEROMETERS

- Choice of charge mode, ICP[®] and 3-wire low power varieties
- Mountable via adhesive or soldering with choice of integral cable or solder pin connections
- Variety of sensitivities to accommodate a wide variety of applications

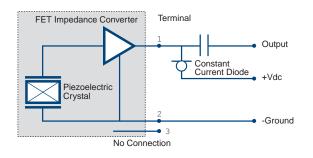


IDEAL FOR CONTINUOUS VIBRATION MONITORING IN HIGH-VOLUME AND COMMERCIAL OEM APPLICATIONS

Embeddable accelerometers offer an affordable solution for vibration and shock measurements in high-volume and commercial OEM applications. The units are particularly well suited for shock and impact detection of packages or components, as well as bearing and gear mesh vibration measurements in predictive maintenance and condition monitoring requirements. The compact designs may be imbedded into machinery at the OEM level to provide value-added monitoring protection.

The units employ field-proven, solid-state, piezoelectric sensing elements for durability and broadband performance. Choose from either charge mode types, which achieve high operating temperatures or voltage mode ICP[®] types, with built-in signal conditioning microelectronics, for simplified operation and connectivity to data acquisition and vibration monitoring instrumentation.

2-Wire ICP® Configuration



	Sensitivity	See "Base Model" Table			
	Measurement Range	See "Base Model" Table			
	Frequency Range	0.5 to 10,000 Hz		0.5 to 5000 Hz	
	Resonant Frequency	>25 kHz		>16 kHz	
	Broadband Resolution	1800 µg rms	350 µg rms	35 µg rms	
	Non-Linearity				
	Transverse Sensitivity	≤7%			
	Environmental				
	Overload Limit (Shock)	5000 g pk 49050 m/s² pk			
	Temperature Range 65 to +185 °F -54 to +85 °C				
	Electrical				
	Settling Time	≤2 sec		≤10 sec	
9	Discharge Time Constant	≥0.3 sec ≥1 s		≥1 sec	
9	Excitation Voltage	18 to 28 VDC			
9	Constant Current Excitation	2 to 20 mA			
_	Output Impedance	<100 ohm	<150 ohm	<550 ohm	
_	Output Bias Voltage	8 to 12 VDC			
_	Physical				
	Sensing Element	Ceramic			
_	Sensing Geometry	Shear			
_	Housing Material	Stainless Steel			
_	Sealing Her			rmetic	
_	Mounting	Adhesive or Solder			
_	Weight	0.08 oz 2.2 g	0.1 oz 3.0 g	0.88 oz 25 g	

Low Profile TO-5

TO-5

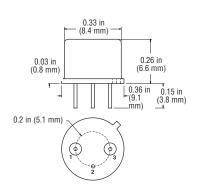
TO-8

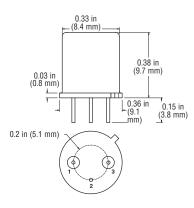
SPECIFICATIONS

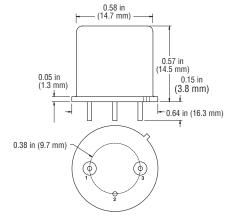
Package Size

Performance

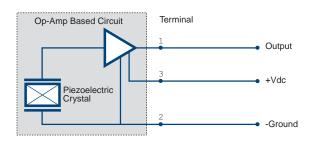
BASE MODEL					
66	Pellet A	Pellet Accelerometer			
	Sensor	Input			
	102A	Low Profile T0-5, 10 mV/g Sensitivity, 500 g Measurement Range			
	122A	Low Profile TO-5, 50 mV/g Sensitivity, 100 g Measurement Range			
	162A	Low Profile TO-5, 1 mV/g Sensitivity, 5000 g Measurement Range			
	212A	TO-5, 100 mV/g Sensitivity, 50 g Measurement Range			
	312A	TO-8, 100 mV/g Sensitivity, 50 g Measurement Range			
	322A	TO-8, 500 mV/g Sensitivity, 10 g Measurement Range			
	332A	TO-8, 1000 mV/g Sensitivity, 5 g Measurement Range			
		Output			
		ΡZ	Positive output along Z-axis		
		NZ	Negative output along Z-axis		
			Mounting		
			1 Header Pins		
			2	Integral 1ft Cable	





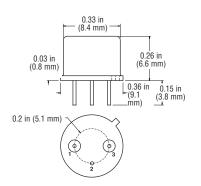


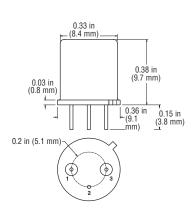
3-Wire Low Power Configuration

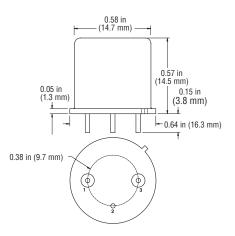


BASE MODEL					
66	Pellet A	llet Accelerometer			
	Sensor	nsor Input			
	103P	Low Profile T0-5, 10 mV/g Sensitivity, 200 g Measurement Range			
	203P	TO-5, 50 mV/g Sensitivity, 20 g Measurement Range			
	213P	TO-5, 100 mV/g Sensitivity, 20 g Measurement Range			
	313P	TO-8, 100 mV/g Sensitivity, 20 g Measurement Range			
	323P	TO-8, 500 mV/g Sensitivity, 4 g Measurement Range			
	333P	T0-8, 1	TO-8, 1000 mV/g Sensitivity, 2 g Measurement Range		
		Output			
		ΡZ	Positive output along Z-axis		
		NZ	Negative output along Z-axis		
			Mounting		
			1 Header Pins		
			2	Integral 1ft Cable	

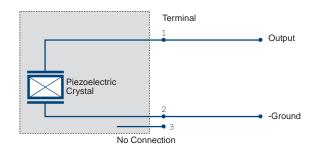
SPECIFICATIONS						
Package Size	Low Profile TO-5	T0-5	T0-8			
Performance						
Sensitivity	Se	See "Base Model" Table				
Maggurament Danga	(0.5 × Excitation Voltage) - 0.5 V					
Measurement Range		Sensitivity (V/g)				
Frequency Range	0.5 to 1	0000 Hz	0.5 to 5000 Hz			
Resonant Frequency	>25	kHz	>16 kHz			
Broadband Resolution	4900 µg rms	1700 µg rms	1040 µg rms			
Non-Linearity		≤1%				
Transverse Sensitivity		≤7%				
Environmental						
Overload Limit (Shock)	5000 g pk 49050 m/s² pk					
Temperature Range	65 to +185 °F -54 to +85 °C					
Electrical						
Settling Time	≤2.5	≤2.5 sec				
Discharge Time Constant	≥0.3 sec		≥0.4 sec			
Excitation Voltage	3 to 12 VDC					
Constant Current Excitation	0.75 mA					
Output Impedance	<100 ohm					
Output Bias Voltage	0.5 x Excitation Voltage					
Physical						
Housing Material	Stainless Steel					
Sealing	Hermetic					
Mounting	Adhesive or Solder					
Weight	0.08 oz 2.2 g	0.1 oz 3.0 g	0.88 oz 25 g			





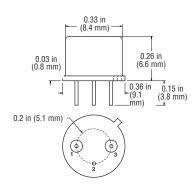


2-Wire Charge Mode



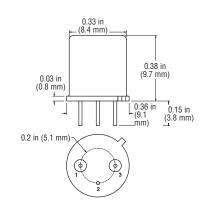
BASE MODEL					
66	Pellet A	et Accelerometer			
	Sensor	Input			
	192C	Low Profile TO-5, 5 pC/g Sensitivity			
	292C	TO-5, 11 pC/g Sensitivity			
	392C	T0-8, 1	TO-8, 100 pC/g Sensitivity		
		Output			
		ΡZ	Positive output along Z-axis		
		NZ	Negative output along Z-axis		
			Mounting		
			1	Header Pins	
			2	Integral 1ft Cable	

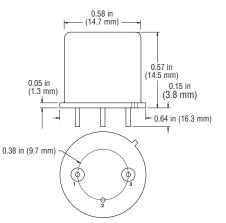
SPECIFICATIONS							
Package Size	Low Profile TO-5	T0-5	T0-8				
Performance							
Sensitivity	S	See "Base Model" Table					
Frequency Range	10	kHz	5 kHz				
Resonant Frequency	>25	kHz	>16 kHz				
Non-Linearity		≤1%					
Transverse Sensitivity		≤7%					
Environmental							
Overload Limit (Shock)	5000 g pk 49050 m/s² pk						
Temperature Range	65 to +185 °F -54 to +85 °C		65 to +250 °F -54 to +121 °C				
Electrical							
Capacitance	350 pF		2700 pF				
Physical							
Housing Material	Stainless Steel						
Sealing	Hermetic						
Mounting	Adhesive or Solder						
Weight	0.08 oz 2.2 g	0.1 oz 3.0 g	0.88 oz 25 g				



PCB PIEZOTRONICS

AN AMPHENOL COMPANY





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