

S E R I E S 3 5 6 A 4 X

# MINIATURE TRIAxIAL ICP® ACCELEROMETERS WITH TEDS

- Small size and lightweight
- TEDS IEEE 1451.4 enabled
- Wide frequency bandwidth
- High resonant frequency
- Hermetically sealed titanium housing
- Ground isolated (J) option



Models 356A43, 356A44 and 356A45 are miniature and lightweight triaxial ICP® accelerometers that are TEDS IEEE 1451.4 enabled. The accelerometers are hermetically sealed and packaged in a 0.4 inch (10.16 mm) titanium cube that weighs 0.15 ounces (4.2 grams). The TEDS feature self identifies these accelerometers and describes the type, operation, and their attributes making them extremely easy for the operator to track. J version models are ground isolated to reduce electrical noise and ground loops.

## TYPICAL APPLICATIONS

- Modal and structural analysis
- NVH studies on automotive parts
- Space restricted installations
- Drop testing and package testing
- Small component qualification testing
- General purpose vibration testing

CE

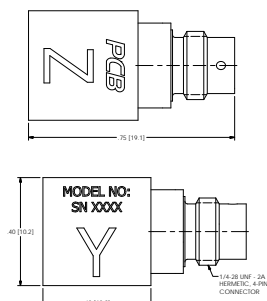
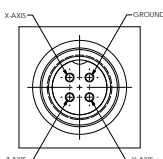
SPECIFICATIONS	356A43 J356A43	356A44 J356A44	356A45 J356A45
<b>Performance</b>			
Sensitivity Tolerance ( $\pm 10\%$ )	10 mV/g [1.02 mV/(m/s <sup>2</sup> )]	50 mV/g [5.1 mV/(m/s <sup>2</sup> )]	100 mV/g [10.2 mV/(m/s <sup>2</sup> )]
Measurement Range	$\pm 500$ g pk [ $\pm 4905$ m/s <sup>2</sup> pk]	$\pm 100$ g pk [ $\pm 981$ m/s <sup>2</sup> pk]	$\pm 50$ g pk [ $\pm 490$ m/s <sup>2</sup> pk]
Frequency Range ( $\pm 5\%$ )	0.7 – 7,000 Hz		
Frequency Range ( $\pm 10\%$ )	0.4 – 10,000 Hz		
Resonant Frequency	$\geq 30$ kHz		
Non-linearity	0.0008 g rms [0.008 m/s <sup>2</sup> rms]	0.0006 g rms [0.006 m/s <sup>2</sup> rms]	0.0005 g rms [0.005 m/s <sup>2</sup> rms]
Transverse Sensitivity	$\leq 1\%$		
Transverse Sensitivity	$\leq 6\%$		
TEDS Compliant (IEEE 1451.4)	Yes		
<b>Environmental</b>			
Overload Limit (Shock)	$\pm 5000$ g pk [ $\pm 49,050$ m/s <sup>2</sup> pk]		
Temperature Range (Operating)	-65 to +250 °F	-65 to +200 °F	-65 to +185 °F
	-54 to +121 °C	-54 to +93 °C	-54 to +85 °C
<b>Electrical</b>			
Excitation Voltage	20-30 VDC		
Constant Current Excitation	2-20 mA		
Electrical Isolation	1 x 10 <sup>9</sup> ohm (J option only)		
<b>Physical</b>			
Housing Material	Titanium		
Sealing	Hermetic		
Weight	0.15 oz [4.2 g]		
Electrical Connector	1/4 – 28 4-pin (side)		
	<b>356A43, 356A44, 356A45</b>		<b>J356A43, J356A44, J356A45</b>
Size (height x width x length)	0.4 x 0.4 x 0.75 in. (10.2 x 10.2 x 19.1 mm)		0.47 x 0.43 x 0.78 in. (11.8 x 11.0 x 19.8 mm)

#### 4-CONDUCTOR CABLES:

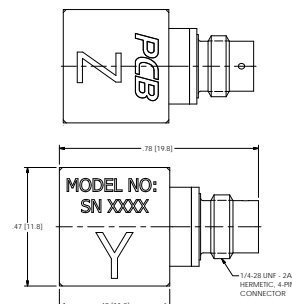
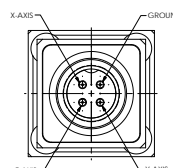
Cable Series	010	034	019	036	078
Cable Style	General Purpose	General Purpose Low Noise	Flexible Lightweight	Flexible	Rugged Flexible
Jacket Material	FEP	FEP	Silicone	Silicone	Polyurethane
Cable Jacket Diameter	0.1 in	0.077 in	0.070 in	0.104 in	0.119 in
	2.54 mm	1.96 mm	1.77 mm	2.64 mm	3.02 mm
Temperature Range	-130 to +392 °F	-130 to +392 °F	-76 to +500 °F	-76 to +392 °F	-58 to +185 °F
	-90 to +200 °C	-90 to +200 °C	-60 to +260 °C	-60 to +200 °C	-50 to +85 °C
Pull Strength	34 lb	19 lb	10 lb	30 lb	25 lb
10-foot cable assembly model number**	010G10	034G10	019AY010JW	036G10	078G10

\*\*The model numbers provided are for BNC plug terminated 10-foot cable assemblies compatible with the 356A4X series.

#### Model 356A4X



#### Model J356A4X



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