

# TEDS general purpose accelerometer

## ED-786A



### Benefits

- Simplifies troubleshooting
- Reduces safety risks - no more climbing on machines to verify connections
- Reduces costs for set-up and tear-down
- No need to recalibrate replacement units - data acquisition system will recalibrate itself
- Designed to integrate with wireless transmitters and receivers
  - eliminates long cables
  - reduces installation, maintenance and upgrade costs of measurement and control systems

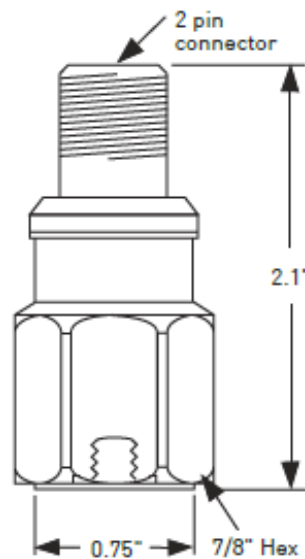
### Key features

- Contains transducer electronic data sheet (IEEE 1451 - TEDS)
- Self-identifying
- Corrosion resistant
- Ground isolated
- Rugged design
- Hermetically sealed
- ESD protection
- Reverse wiring protection

### Certifications



Function	Connector pin
ground	shell
power/signal	A
common	B



Note: Due to continuous process improvement, specifications are subject to change without notice.  
This document is cleared for public release.

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### SPECIFICATIONS

<b>Sensitivity, <math>\pm 5\%</math>, 25° C</b>	100 mV/g
<b>Acceleration range</b>	80 g peak
<b>Amplitude nonlinearity</b>	1%
<b>Frequency response</b>	$\pm 5\%$ 3 - 5,000 Hz $\pm 10\%$ 1 - 9,000 Hz $\pm 3$ dB 0.5 - 14,000 Hz
<b>Resonance frequency</b>	30 kHz
<b>Transverse sensitivity, max</b>	5% of axial
<b>Temperature response</b>	-50° C -5% +120° C +5%
<b>Voltage source</b>	18 - 30 VDC
<b>Current regulating diode</b>	2 - 10 mA
<b>Electrical noise, equiv g</b>	
Broadband 2.5 Hz to 25 kHz	700 $\mu$ g
Spectral 10 Hz	10 $\mu$ g/ $\sqrt$ Hz
100 Hz	5 $\mu$ g/ $\sqrt$ Hz
1000 Hz	5 $\mu$ g/ $\sqrt$ Hz
<b>Output impedance, max</b>	100 $\Omega$
<b>Bias output voltage</b>	12 VDC
<b>Grounding</b>	case isolated, internally shielded
<b>Temperature range<sup>1</sup></b>	-50 to +120° C
<b>Vibration limit</b>	500 g peak
<b>Shock limit</b>	5,000 g peak
<b>Electromagnetic sensitivity, equiv g, max</b>	70 $\mu$ g/gauss
<b>Sealing</b>	hermetic
<b>Base strain sensitivity, max</b>	0.0002 g/ $\mu$ strain
<b>Sensing element design</b>	PZT ceramic / shear
<b>Weight</b>	95 grams
<b>Case material</b>	316L stainless steel
<b>Mounting</b>	1/4-28 UNF tapped hole
<b>Output connector</b>	2 pin, MIL-C-5015 style
<b>Mating connector</b>	R6 type
<b>Recommended cabling</b>	J10 / J9T2A

### Contact

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### Accessories supplied:

- TEDS calibration data
- SF6 mounting stud (international customers specify mounting requirements)

**Notes:** <sup>1</sup> Temperature range is limited to -40°C to +85°C when using the IEEE 1451 - TEDS function.

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