

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

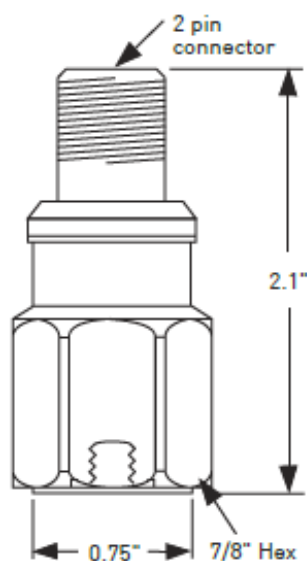
Key features

- 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

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

Accessories supplied:

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

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

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