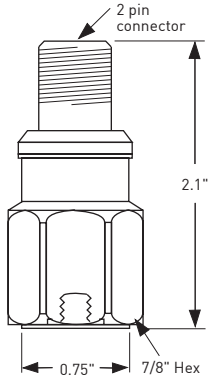
Wilcoxon Research

Model 786T
General purpose accelerometer with internal temperature sensor

Features
- Measures both acceleration and temperature
- Rugged design
- Corrosion resistant
- Hermetic seal
- Case isolated
- ESD protection
- Reverse wiring protection



Dynamic

Sensitivity, ±5%, 25°C	100 mV/g
Acceleration range	60 g peak
Amplitude nonlinearity	1%
Frequency response:	
± 5%	3 - 5,000 Hz
±10%	1 - 7,000 Hz
± 3 dB	0.5 - 12,000 Hz
Resonance frequency	30 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	
–50°C	–10%
+120°C	+6%
Temperature output sensitivity, ± 1.5°C	10 mV/°C
Temperature measurement range	+2°C to +120°C

Electrical

Power requirement: voltage source	18 - 30 VDC
current regulating diode	2 - 10 mA
Electrical noise, equiv. g:	
Broadband 2.5 Hz to 25 kHz	700 µg
Spectral 10 Hz	10 µg/√Hz
100 Hz	5 µg/√Hz
1000 Hz	5 µg/√Hz
Output impedance, max.	100 Ω
Bias output voltage, nominal	10 VDC
Grounding	case isolated, internally shielded

Environmental

Temperature range	–50 to 120°C
Vibration limit	500 g peak
Shock limit	5,000 g peak
Electromagnetic sensitivity, equiv. g, max	70 µg/gauss
Sealing	Hermetic
Base strain sensitivity, max.	0.0002 g/µstrain

Physical

Sensing element design	PZT ceramic / shear
Weight	90 grams
Case material	316L stainless steel
Mounting	1/4 - 28 UNF tapped hole
Output connector	3 pin, MIL-C-5015 style
Mating connector	R6G
Recommended cabling	J9T3A

Connector pin	Function
Shell	ground
A	accelerometer power/ signal
B	accelerometer common
C	temperature sensor signal

Accessories supplied: SF6 mounting stud (International customers specify mounting requirements); calibration data (level 2)

Wilcoxon Research Inc
21 Firstfield Rd
Gaithersburg, MD 20878
USA

Tel: 301 330 8811
Fax: 301 330 8873
Email: sensors@wilcoxon.com

www.meggitt.com

MEGGITT
smart engineering for extreme environments

98733 Rev.A.2 2/05