

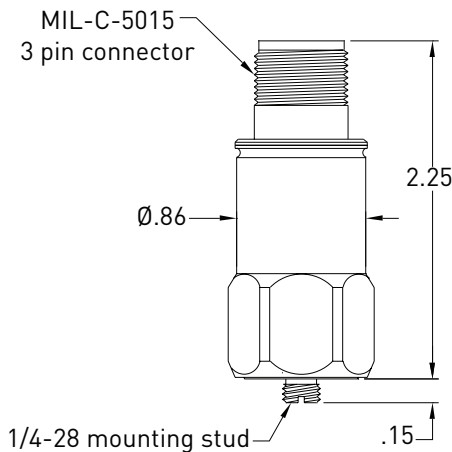


Wilcoxon Research model 786T General purpose accelerometer with internal temperature sensor



Features

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



Dynamic

Sensitivity, $\pm 5\%$, 25° C.....	100 mV/g
Acceleration range, VDC >25V	80 g peak
Amplitude nonlinearity.....	1%
Frequency response:	
$\pm 5\%$	3 - 5,000 Hz
$\pm 10\%$	1 - 7,000 Hz
± 3 dB	0.5 - 12,000 Hz
Resonance frequency.....	30 kHz
Transverse sensitivity, max.....	5% of axial
Temperature response:	
-25° C.....	-10%
+120° C.....	+10%

Temperature sensor

Output sensitivity.....	10 mV/°C
Measurement range.....	2 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 μ g
Spectral	
10 Hz.....	10 μ g/√Hz
100 Hz.....	5 μ g/√Hz
1000 Hz.....	5 μ g/√Hz
Output impedance, max.....	100 Ω
Bias output voltage, nominal.....	12 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 μ g/gauss
Sealing	hermetic
Base strain sensitivity, max.....	0.0002 g/ μ strain

Physical

Sensing element design.....	PZT / shear
Weight.....	90 g
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

Connections

Function	Connector pin
ground / case	shell
accel power / signal	A
accel and sensor common	B
sensor signal	C

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

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