

# General purpose accelerometer with internal temperature sensor 786T



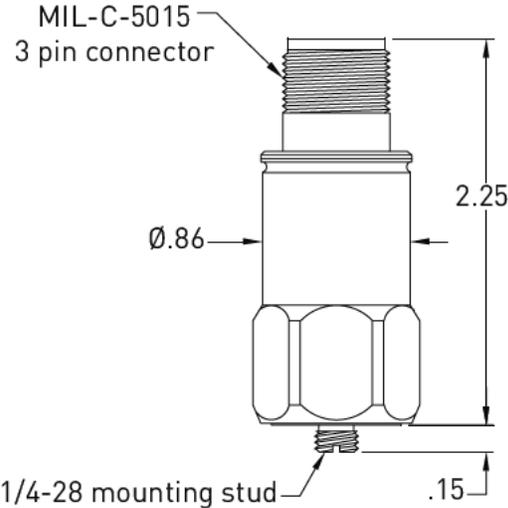
### Key features

- Measures both acceleration and temperature
- Rugged design
- Corrosion resistant
- Hermetically sealed
- Case isolated
- ESD-protected
- Reverse wiring protection

### Certifications



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



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

# General purpose accelerometer with internal temperature sensor

## 786T

### SPECIFICATIONS

<b>Sensitivity, <math>\pm 5\%</math>, 25° C</b>	100 mV/g
<b>Acceleration range, VDC &gt; 25 V</b>	80 g peak
<b>Amplitude nonlinearity</b>	1%
<b>Frequency response:</b>	
$\pm 5\%$	3 - 5,000 Hz
$\pm 10\%$	1 - 7,000 Hz
$\pm 3$ dB	0.5 - 12,000 Hz
<b>Resonance frequency</b>	30 kHz
<b>Transverse sensitivity, max</b>	5% of axial
<b>Temperature response:</b>	
-25° C	-10%
+120° C	+10%
<b>Temperature sensor:</b>	<b>Output sensitivity</b> 10 mV/°C
	<b>Measurement range</b> 2 to 120° C
<b>Power requirement:</b>	
Voltage source	18 - 30 VDC
Current regulating diode	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/ $\sqrt{\text{Hz}}$
	100 Hz 5 $\mu$ g/ $\sqrt{\text{Hz}}$
	1,000 Hz 5 $\mu$ g/ $\sqrt{\text{Hz}}$
<b>Output impedance, max</b>	100 $\Omega$
<b>Bias output voltage, nominal</b>	12 VDC
<b>Grounding</b>	case isolated, internally shielded
<b>Temperature range</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 / shear
<b>Weight</b>	90 grams
<b>Case material</b>	316L stainless steel
<b>Mounting</b>	1/4-28 UNF tapped hole
<b>Output connector</b>	3-pin, MIL-C-5015 style
<b>Mating connector</b>	R6G
<b>Recommended cabling</b>	J9T3A

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### Contact

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### Accessories supplied:

- Calibration data (level 2)
- SF6 mounting stud (international customers specify mounting requirements)