

# High temperature accelerometer

## HT787A

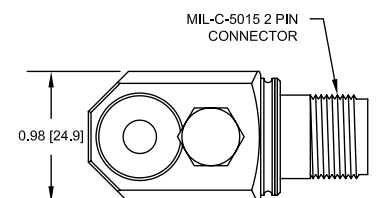
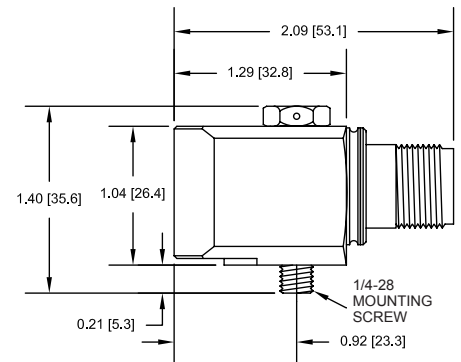
### SPECIFICATIONS

<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>	$\pm 10\%$	1.0 - 5,000 Hz
	$\pm 3$ dB	0.5 - 10,000 Hz
<b>Resonance frequency, nominal</b>		22 kHz
<b>Transverse sensitivity, max</b>		5% of axial
<b>Temperature response:</b>	-25°C	-10%
	+150°C	+15%
<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	25°C: 700 $\mu$ g 150°C: 1,100 $\mu$ g
	10 Hz	10 $\mu$ g/ $\sqrt{\text{Hz}}$ (25°C) 14 $\mu$ g/ $\sqrt{\text{Hz}}$ (150°C)
Spectral	100 Hz	5 $\mu$ g/ $\sqrt{\text{Hz}}$ (25°C) 7 $\mu$ g/ $\sqrt{\text{Hz}}$ (150°C)
	1,000 Hz	5 $\mu$ g/ $\sqrt{\text{Hz}}$ (25°C) 7 $\mu$ g/ $\sqrt{\text{Hz}}$ (150°C)
<b>Output impedance, max</b>		100 $\Omega$
<b>Bias output voltage:</b>	+25°C	13 VDC
	+150°C	12 VDC
<b>Grounding</b>		case isolated, internally shielded
<b>Temperature range<sup>1</sup></b>		-50° to +165°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>		145 grams
<b>Case material</b>		316L stainless steel
<b>Mounting</b>		1/4-28 captive screw
<b>Output connector</b>		2 pin, MIL-5015 style
<b>Recommended cabling</b>		J9F / J9T2A



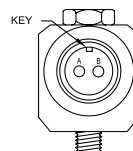
### Key features

- Operation in environments up to 165°C
- Built with extended range components for long-lasting operation
- Manufactured in ISO 9001 facility



**Notes:** <sup>1</sup> Dependent on current supply. BOV, dynamic range and noise may vary.

**Accessories supplied:** 1/4-28 captive screw (metric mounting available); calibration data (level 2)



Connections	
Function	Connector pin
power/signal	A
common	B
ground	shell

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