

# High temperature accelerometer

## HT780A

### SPECIFICATIONS

<b>Sensitivity, ±5%, 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>	±5%	3 - 5,000 Hz	
	±10%	1 - 9,000 Hz	
	±3 dB	0.5 - 14,000 Hz	
<b>Resonance frequency, nominal</b>		30 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>	<b>25°C</b>		
	<b>150°C</b>		
	<b>Broadband</b> 2.5 Hz to 25 kHz	700 µg	1,100 µg
	<b>Spectral</b> 10 Hz	10 µg/√Hz	14 µg/√Hz
	100 Hz	5 µg/√Hz	7 µg/√Hz
	1,000 Hz	5 µg/√Hz	7 µg/√Hz
<b>Output impedance, max</b>		100 Ω	
<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 µg/gauss	
<b>Sealing</b>		hermetic	
<b>Base strain sensitivity, max</b>		0.0002 g/µstrain	
<b>Sensing element design</b>		PZT, shear	
<b>Weight</b>		62 grams	
<b>Case material</b>		316L stainless steel	
<b>Mounting</b>		1/4-28 UNF tapped hole	
<b>Output connector</b>		2 pin, MIL-C-5015 style	

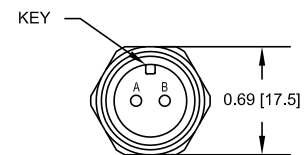
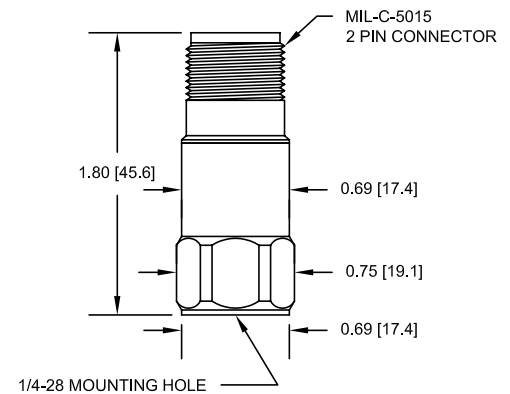
**Notes:** <sup>1</sup> Dependent on current supply. BOV, dynamic range and noise may vary.

**Accessories supplied:** SF6 mounting stud (metric mounting available); calibration data (level 2)



### Key features

- Compact, lightweight
- Operation in environments up to 165°C
- Manufactured in ISO 9001 facility



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.