

# Model 797T-1

## General purpose accelerometer with internal temperature sensor

### Dynamic

Sensitivity, $\pm 5\%$ , 25°C .....	100 mV/g
Acceleration range .....	80 g peak
Amplitude nonlinearity .....	1%
Frequency response:	
$\pm 5\%$ .....	3 - 5,000 Hz
$\pm 10\%$ .....	2 - 7,000 Hz
$\pm 3$ dB .....	1 - 12,000 Hz
Resonance frequency .....	26 kHz
Transverse sensitivity, max .....	5 % of axial
Temperature response .....	
-50°C .....	-5%
+120°C .....	+5%
Temperature output sensitivity, $\pm 5\%$ .....	10 mV/°K
Temperature measurement range .....	223 to 390°K (-50 to 120°C)

### Electrical

#### Temperature sensor

Power requirement:	voltage source .....	18 - 30 VDC
	current regulating diode .....	2 - 4 mA
Grounding .....		case isolated, internally shielded

#### Accelerometer

Power requirement:	voltage source .....	18 - 30 VDC
	current regulating diode .....	2 - 10 mA

Electrical noise, equiv. g:		
Broadband	2.5 Hz to 25 kHz .....	600 $\mu$ g
Spectral	10 Hz .....	8 $\mu$ g/ $\sqrt$ Hz
	100 Hz .....	5 $\mu$ g/ $\sqrt$ Hz
	1000 Hz .....	5 $\mu$ g/ $\sqrt$ Hz

Output impedance, max. ....	100 $\Omega$
Bias output voltage .....	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 .....	30 $\mu$ g/gauss
Seal .....	hermetic
Base strain sensitivity .....	0.002 g/ $\mu$ strain

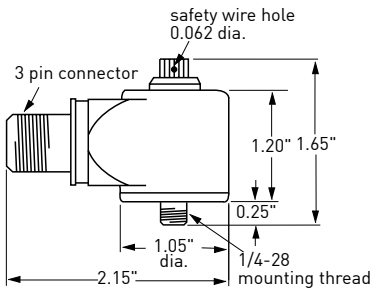
### Physical

Sensing element design .....	PZT ceramic / shear
Weight .....	135 grams
Case material .....	316L stainless steel
Mounting .....	1/4-28 captive socket head screw
Output connector .....	3 pin, MIL-C-5015 style
Mating connector .....	R6G type
Recommended cabling .....	J9T3A

Accessories supplied: #12105-01 captive screw (International customers specify mounting requirements); calibration data (level 3)

### Features

- Senses both acceleration and temperature
- Rugged design
- Hermetic seal
- Ground isolated
- ESD protection
- Reverse wiring protection
- Mounts in any orientation



### Connections

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