

E540–10 High Temperature Accelerometer

Applications

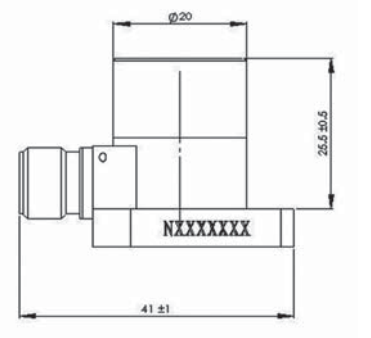
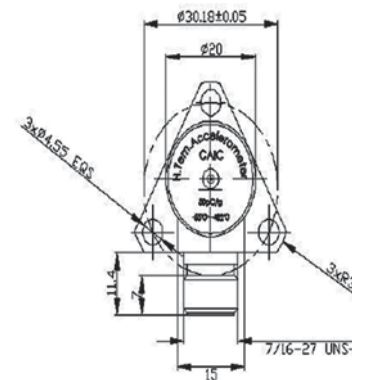
- Used for vibration test on high temperature parts of aviation engine
- Adopt high temperature resistant design, balance differential structure
- Long mean time between failure (MTBF), balance differential output
- Used for vibration measurement on turbine engine
- Aircraft gas–turbine testing

Characteristics

- Passive, charge output
- Continuous working temperature $-200^{\circ}\text{C} \sim +649^{\circ}\text{C}$
- Hermetically sealed, ground–isolated
- High temperature response
- high stability, excellent reliability & durability under harsh environment



Dynamic Characteristics	
Sensitivity($\pm 10\%$)	10pC/g
Resonant frequency	16kHz
Frequency response: $\pm 5\%$	5 ~ 2,500Hz
Transverse Sensitivity	$\leq 5\%$
Non–linearity	1%
Electrical Characteristics	
Excitation voltage	Passive
Resistance	$\geq 1\text{G}\Omega$
+649°C	$\geq 10\text{M}\Omega$
Insulation Resistance	$\geq 100\text{M}\Omega$
+649°C	$\geq 10\text{M}\Omega$
Capacitance	150pF
Grounding	Signal return is isolated from case
Environmental characteristics	
Working temperature	$-50^{\circ}\text{C} \sim +649^{\circ}\text{C}$
Humidity	Hermetically sealed
Vibration limit	1000 g pK
Shock limit	2000 g pK
Base strain Sensitivity	0.002 g pK/ μ Strain
Thermal sensitivity Drift	0.07 g pK/ $^{\circ}\text{C}$
Physical characteristics	
Weight	200grams
Case material	INCONEL
Mounting Torque	1.6Nm



- Through the assessment of environmental test: Vibration, Shock, Acceleration, Electromagnetic compatibility, Temperature, Altitude, Temperature impact, Mould, Salt mist, Humidity and hot etc.