G57AS Low noise IEPE accelerometer

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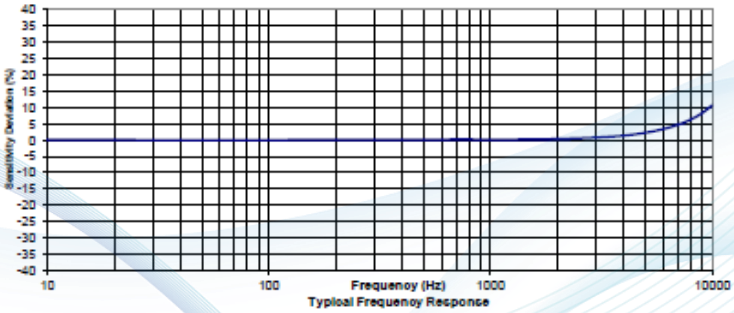
G57AS is a low noise IEPE single axial accelerometer permitting simultaneous shock and vibration measurements. G57AS features an annular shear ceramic crystal which exhibits excellent output stability over time. The accelerometer incorporates an internal circuit with TEDS(optional) in a two-wire IEPE system which transmits its low impedance voltage output through the same cable that supplies the constant current power. Signal ground is connected to the outer case of the unit. Isolated mounting studs or housing are available. Polarity inversion protection for the amplify circuit is inherent in the circuit design. The welded stainless-steel construction provides a lightweight hermetic housing. The miniature 10-32 glass insulated connector provides long-term stability over the operating temperature range. In addition to adhesive mounting, the G57AS has 10-32 threaded holes for stud mounting on the test object. The G57AS provides wide frequency response, which is ideal for dynamic vibration and shock measurement especially for lightweight structures and drop testing for the packaging industry. 1032 is a 10-32 to BNC breakout cable for the sensor.

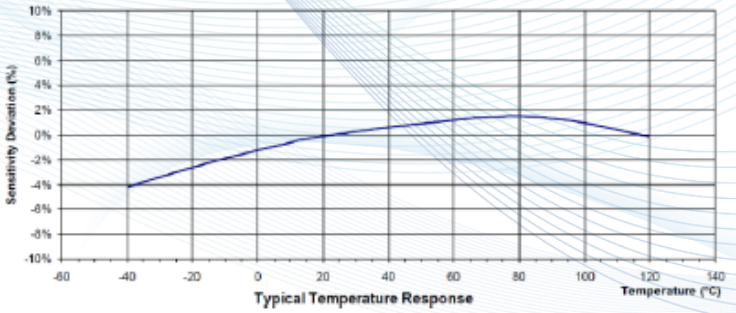
Features:

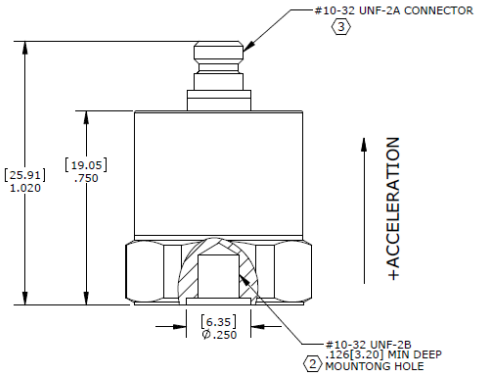
- High resolution signal
- Adhesive or stud mounting
- Hermetic seal
- Annular shear mode
- Wide temperature range
- Wide frequency response

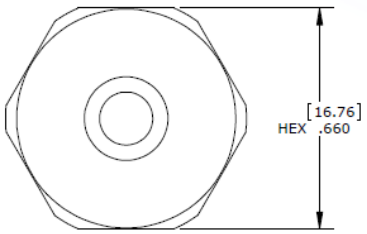


Application :

- Vibration monitoring
- Shock testing
- Road testing
- Modal analysis
- Aircraft testing







Specification：

Dynamic performance	Unit					
Measurement Range	g	5	10	25	50	100
Sensitivity ±10%	mV/g	1000	500	200	100	50
Frequency Range ±5%	Hz	1 ~ 5000	0.8 ~ 5000	0.6 ~ 5000	0.5 ~ 5000	0.5 ~ 6000
Frequency Range ±10%	Hz	0.6-8000	0.5 ~ 8000	0.4 ~ 8000	0.3 ~ 8000	0.3 ~ 9000
Frequency Range ±3dB	Hz	0.3 ~ 12000	0.2 ~ 12000	0.1 ~ 12000		
Resonant Frequency	kHz	32				
Transverse Sensitivity	%	<5				
Non-Linearity	% FSO	±1				
Shock Limit	g pk	±4000				
Environmental parameters						
Temperature response -55 ~ +125°C	%/°C	±10				
Operating and Storage Temperature	°C	-50~125				
Bias Voltage (Room Temp.)	Vdc	8 ~ 12				
Bias Voltage (-50~125) °C	Vdc	6 ~ 13				
Electrical characteristics						
Output Impedance	Ω	< 100				
Full Scale Output Voltage	V	±5				
Insulation Resistance	MΩ	> 100				
Supply Voltage	Vdc	18 ~ 30				
Supply Current	mA	2 ~ 10				
Physical properties						
Weight (Excluding Cable)	Grams	12.0				
Sensing Element	Piezo Ceramic					
Sensing Geometry	Shear					
Housing Material	Stainless Steel					
Sealing	Welded Hermetic					
Grounding	Signal return connected to case					
Output method	IEPE					

Random accessory		
HS007	Mounting stud 10-32 to 10-32 thread	One stud Included
HS008	Mounting stud 10-32 to M5 thread	
Availability		
-T	T=IEPE output with TEDS	

Optional cables		
1032	Single axis accelerometer cable, 10-32 connector, high temperature and low noise	Optional
1032RG	Single axis accelerometer cable, 10-32 connector, black coaxial	Optional
1032D3	Single-axis accelerometer cable, 10-32 connector, ϕ3 blue flexible cable	Optional

Ordering information：

G57AS	GGGG	ZZZ
Range 0005=5g 0010=10g 0025=25g 0050=50g 0100=100g		
Output signal T=IEPE 输出 with TEDS		

E.G：

G57AS-5

Model G57AS, 0005, Connector, No Options

G57AS-5T

Model G57AS, 0005, Connector, TEDS

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