

BLITZ Sensor

MEMS Test and Measurement Sensors



BS-AO18

Variable Capacitance, Triaxial Accelerometers

- ◇ Wide bandwidth, Ultra-low frequency
- ◇ Small volume, Lightweight
- ◇ Universal applies to many occasions
- ◇ Excellent Long-term Stability
- ◇ Low noise
- ◇ With a wide supply voltage range

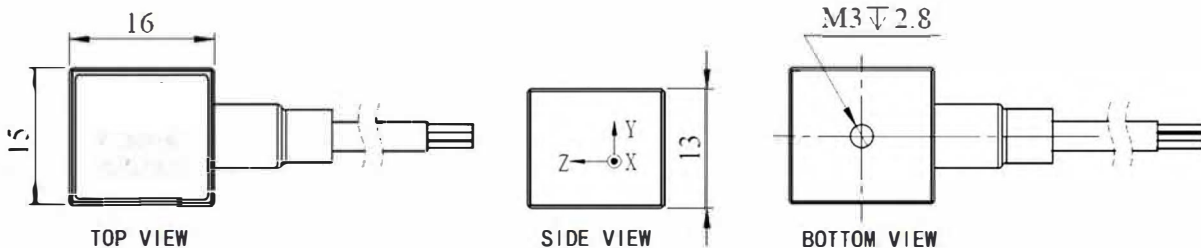
Parameter	Unit	-30	-50	-100	-200	-500	-1000	-5000	-10000	
Range	g	±10	±30	±50	±100	±200	±500	±1000	±5000	±10000
Frequency Response ±5%	Hz	0~1000	0~1500	0~1500	0~2000	0~2000	0~3000	0~3000	0~3000	0~3000
Frequency Response ±3dB	Hz	0~2000	0~3000	0~5000	0~6000	0~7000	0~10000	0~10000	0~10000	0~10000
Resonant Frequency	kHz	2.7	5.5	5.5	9.8	9.8	18.0	20.0	20.0	20.0
Zero Output	V	2.5±0.1	2.5±0.1	2.5±0.1	2.5±0.1	2.5±0.1	2.5±0.1	2.5±0.1	2.5±0.1	2.5±0.1
Sensitivity(@160Hz)	mV/g	200±10	66.7±3	40±2	20±1	10±1	4±0.4	2±0.2	0.4±0.04	0.2±0.02
Transverse Sensitivity	%	≤3	≤3	≤3	≤3	≤3	≤3	≤3	≤3	≤3
Resolution(Typ.)	mg	0.3	1	2.5	5	10	20	30	50	200
Noise Density	μV/√Hz	10	10	10	10	10	10	10	10	10
Non-linearity	% FS	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5	≤1	≤1	≤2	≤4
Thermal Zero Shift	% FS/ C	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01
Thermal Sensitivity Shift	%/°C	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02
Operating Temp.	°C	-55~+125								
Storing Temp.	°C	-55~+125								
Shock (half-sine)	g	10000								
Vibration (sine, random vibration)	/	100g pk, 20~2000 Hz / 40g rms, 20~2000 hz								
Packaging	/	Stainless Steel								
Supply Voltage	V	+7~+36								
Supply Current	mA	≤25								
Output Voltage	V	(0.5±0.1)~(4.5±0.1)								
Insulated Resistance	MΩ	>100 (@100VDC)								
Output Impedance/Load Drive	Ω	≤10								
Weight	g	≤15 g (cable weight 15 g/m)								
Size	mm ³	15×16×13mm								
Mounting Type	/	M3 Mounting Screws / Adhesive								
Connector	/	5 core shielding cable								

All values are typical at +25°C, 12V±1V unless otherwise statement.

◇ Applications

Aviation & Aerospace Helicopter & Aircraft Testing (HUMS) Structuring vibration test, Modal Analysis
 Civil Engineering Structural Testing Railway Technology Industrial Testing

◇ Structure (unit:mm)



Red	Black	Green	Yellow	White
VCC	GND	Xout	Yout	Zout
Power	Ground	X output	Y output	Z output