MEMS Test and Measurement Sensors

- ◇ ±2~±2,000g Range
- ◇ Low Noise
- ◇ -55~+125°C Operating Temp.
- ◇ Large Bandwidth(DC~10000Hz@±3dB)
- ◇ 5,000g Shock Resistance
- ◇ Small Volume, Lightweight

BS-AO16

Single Axis Accelerometers

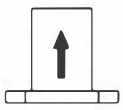
Parameter	Unit	02	-10	-30	-50	-100	-200	-500	-1000	-2000
Range	g	±2	±10	±30	±50	±100	±200	±500	±1000	±2000
Frequency Response(@±5%)	Hz	0~250	0~1000	0~1500	0~1500	0~2000	0~2000	0~3000	0~3000	0~3000
Frequency Response(@±3dB)	Hz	0-800	0-2000	0-3000	0-5000	0-6000	0-7000	0-10000	0-10000	0-10000
Resonant Frequency	kHz	1.3	2.7	5.5	5.5	9.8	9.8	18.0	25.5	25.5
0g 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
Scale Factor@160Hz	mV/g	1000±20	200±10	66.7±3	40±2	20±1	10±1	4±0.4	2±0.2	1±0.1
Resolution(Typ.)	mg	0.1	0.3	1	2.5	5	10	20	30	50
Noise Density(Typ.)	μV/√Hz	5	10	10	10	10	10	10	10	10
Non-linearity	%FS	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5	≤1	≤1	≤1
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
Output Range	V	(0.5 ± 0.1) ~ (4.5 ±0.1)								
Operating Voltage	V	5 ± 0.1								
Operating Current	mA	7 (Typ.)								
Insulation Resistance	MΩ	>100 (@100VDC)								
Output Impedance	Ω	≤10								
Housing Material	/	Alluminum Alloy								
Shock(Half-sine)	g	5000								
Sinusoidal/Random Vibration	/	100g pk, 20~2000 Hz/40g rms, 20~2000Hz								
Connector	/	M1.6 Mounting Screws								
Mounting Thread	/	4 core shielded cable								
Operating Temp.	°C	-55~+125								
Storaging Temp.	°C	-55~+125								
Size	mm	14.5×14×11.8								
Weight	g	≤5 (cable weights 12 grams/meter)								

All values are typical at +25°C, 5V±0.1V unless otherwise statement.

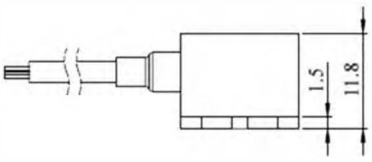
◇ Applications

Structural Vibration Testing | Multi-channel Modal Analysis | Product Testing | Vibration Control | Analytical Model Correlation | Design Studies

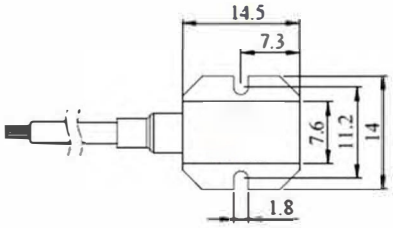
◇ Structure(unit:mm)



SIDE VIEW



FRONT VIEW



TOP VIEW

Red Line	VCC	+PWR
Black Line	GND	Ground
Green Line	OUT	Output

Definition