

Watertight Type Accelerometer

DETAILS

B02Y77 B06Y76 B06Y77 type three-axis watertight acceleration sensor, using piezoelectric ceramic shear structure, with a wide band frequency response, high-quality piezoelectric ceramics with long-term stability can ensure years of accurate measurement. Built-in low impedance circuit, low noise, better sensitivity temperature response and other characteristics. One-piece waterproof polyurethane cable, unique waterproof technology, multi-layer protection measures, pressure resistance up to 2MPa, the shell is made of titanium alloy with lower density, laser welding. Each of the three axial direction is equipped with calibration holes for easy calibration and installation, with insulation mounting kit as standard.

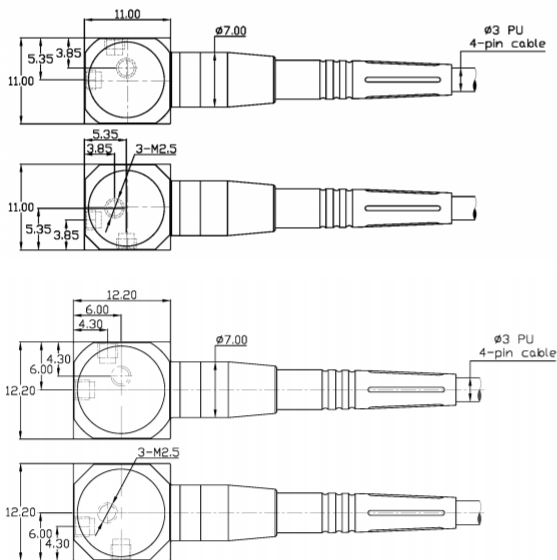
FEATURES

- Integrated Microminiature Built-in
- One-point multi-axial measurement
- Shear structure, stable and reliable
- Insulated mounting base as standard

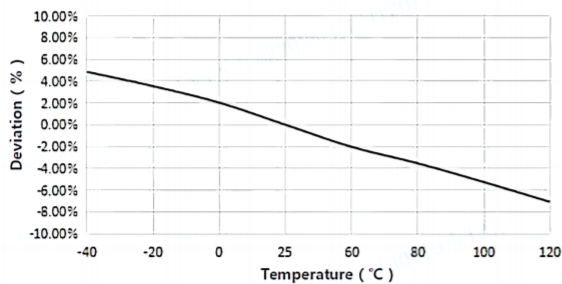
TYPICAL APPLICATIONS

- Underwater vibration testing

Fig_1 Dimensions of B02Y77 B06Y76 B06Y77

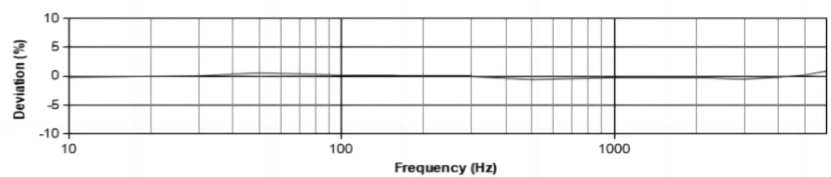


Fig_2 Typical Temperature Response



B02Y77
B06Y76
B06Y77

Fig_3 Typical Frequency Response



Specifications-B0XY7X

MODEL NUMBER	UNIT	B02Y77	B06Y76	B06Y77
PERFORMANCE				
Sensitivity ¹	mV/g	10(±10%)	100	100
	mV/(m/s ²)	1	10	10
Measurement Range	g	±500	±50	±50
Broadband Resolution ²	g rms	0.001	0.0001	0.0001
Non-Linearity ³	%	1		
Frequency Range	± 5%(Hz)	1-9k	1-6k	1-7k
	±10%(Hz)	0.5-10k	0.5-8k	0.5-9k
Resonance Frequency ²	Hz	≥70k	≥22k	≥38k
Discharge Time Constant ²	s	≤1		
Transverse Sensitivity	%	≤5		
ELECTRICAL				
Excitation Voltage	VDC	20-30		
Constant Current Excitation	mA	2-20		
Output Impedance	Ω	≤100		
Output Bias Voltage	V	8-12		
Electrical Isolation	Ω	-		
Spectral Noise ²	μg/√Hz	150	15	15
		40	4	4
		20	2	2
ENVIRONMENTAL				
Sinusoidal Vibration Limit ⁴	g	2200	400	400
Shock Limit ⁴	g	5000	1000	1000
Temperature Range	°C	-50-120		
	°F	-58-248		
Temperature Response ²	%/°C	-0.07	-0.1	-0.07
PHYSICAL				
Sealing	-	Laser welding IP68		
Sensing Element	-	Piezoelectric ceramics		
Housing Material	-	Titanium Alloy		
Size	mm	11 Cube	12.2 Cube	
	in	0.433 Cube	0.480 Cube	
Electrical Connector	-	Connected cable 4-pin Side		
Mounting Thread	-	M2.5/Adhesive		
Weight ²	g	5	7.8	7.8
	oz	0.176	0.275	0.275
TEDS Optional ⁵	-	Yes		

Additional Information

Note:

- @ 160Hz, 24VDC, 4mA conditions
- Typical values
- JBT 6822-2018 7.12.1 Vibration Testing Method
- References the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state
- Some products may have changes in size after adding TEDS

B0XY7X

Supplied Accessories:

- Product Verification Report
- Install Screws

COMPLIANCE WITH STANDARDS



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