

Model Number 7706M1 PERFORMANCE SPECIFICATIONS DOC NO PS7706A

DUAL ELEMENT ACCELEROMETER REVA, ECN 14481, 09/13/18



- DUAL ELEMENT TECHNOLOGY
- EXTENDED LOW FREQUENCY RESPONSE (0 Hz to 10kHz)
- HERMETICALLY SEALED

This accelerometer combines the DC output of variable capacitance element with excellent high frequency response of piezoelectric element

Both outputs are electrically summed up and seamlessly superimposed on each other to provide the broadest frequency response from a single output pin.

		ENGLISH		SI	
PHYSICAL					
Weight, Max.		1.2	OZ	35	grams
Mounting		2X M3 Screws		2X M3 Screws	
Connector	Type	M4.5 X .35, 4-PIN		M4.5 X .35, 4-PIN	
Housing	Material	Titanium]	Titanium]
PERFORMANC	E				
Sensitivity, ±10% [1]		35	mV/g	3.6	mV/m/s ²
Acceleration Range		±50	Gpeak	±491	m/s² peak
Frequency Response, ±10%		0 to 10,000	Hz	0 to 10,000	Hz
Resonance Frequency		>25	kHz	>25	kHz
Linearity [2]		1	% F.S.	1	% F.S.
Transverse Sensitivity		<3	%	<3	%
Output Noise, Broadband, Max.		0.003	Grms	0.03	m/s ² rms
Phase shift mismatch, Max		±2	degrees	±2	degrees
Absolute phase shift, Max [3]		±5	degrees	±5	degrees
Base Strain Sensitivity, Max.		0.0004	g/με	0.0039	m/s²/με
Bias Offset, Max.		0.2	g's	1.96	m/s ²
			±		
ENVIRONMENT			7		1 , 2
Maximum Mechanical Shock		5,000	Gpeak	49,050	m/s ²
Bias Temperature Shift, Max		56	(ppm of span)/°F	101	(ppm of span)/°C
Bias Calibration		1.5	% of span	1.5	% of span
Operating Temperature		-40 to +250	°F	-40 to 121	°C
Thermal Coefficient		0.06	%/°F	0.12	%/°C
Seal		Hermetic	_	Hermetic]
POWER					
Compliance Voltage		+5 to +20	VDC	+5 to +20	VDC
Current Range		5 to 10	mA DC	5 to 10	mA DC
Output Bias Voltage, Typical		2.45	VDC	2.45	VDC
Output Impedance, Nom.		100	Ω	100	Ω
Power Supply R	ejection Ratio	>65	dB	>65	dB
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This family also includes:								
	Model	Sensitivity (mV/g)	Range (Gpeak)	Maximum Shock (Gpeak)	Noise Broadband (grms)			
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Refer to the performance specifications of the products in this family for detailed description

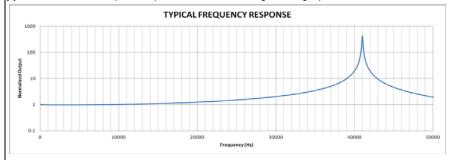
Supplied Accessories:

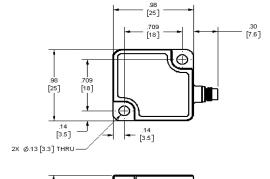
1) Accredited calibration certificate (ISO 17025)

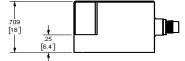
Notes:

- [1] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [2] Measure using zero-based straight line method, % of F.S. or any lesser range.
- [3] 0 to 1000Hz

[4] In the interest of constant product improvement, we reserve the right to change specifications without notice.







Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-7706M1 for more information.

