

## Model Number 7603D1 PERFORMANCE SPECIFICATION DOC NO PS7603D1 TRIAXIAL VARIABLE CAPACITANCE ACCELEROMETER REV C, ECN 13976, 01/19/18

SI



- VARIABLE CAPACITANCE TECHNOLOGY
- DIFFERENTIAL MODE
- HERMETICALLY SEALED

**ENGLISH** 

• DC RESPONSE

		21102101		0.	
PHYSICAL					
Weight, Max		1.3	oz	38	grams
Connector	Туре	9-pin, 5/16-32 UNEF-2A		9-pin, 5/16-32 UNEF-2A	
Material		Titanium Alloy		Titanium Alloy	
Sensing Technology		MEMS		MEMS	
PERFORMANCE					
Input Range		±2	g	±19.6	m/s <sup>2</sup>
Frequency Response (3dB), Nom		0-300	Hz	0-300	Hz
Resonant Frequency		>3000	Hz	>3000	Hz
Sensitivity Differential, ±	5% [1]	250	mV/g	25	mV/m/s <sup>2</sup>
Output Noise, Differentia	al ,Typ	7	μg rms/V Hz	69	μm/s²/V Hz
Non-Linearity, Max [2]		0.5	% F.S	0.5	% F.S
Cross Axis Sensitivity, M	Max	3	%	3	%
ENVIRONMENTAL					
Maximum Mechanical Shock (0.1 ms)		±2000	gpk	±19620	m/s² peak
Bias Temperature Shift	,Max [3]	111	(ppm of span)/°F	200	(ppm of span)/°C
Bias Calibration Error, M	<b>Max</b>	0.5	% of span	0.5	% of span
Operating Temperature	Range	-40 to +257	°F	-40 to +125	°C
Seal		Hermetic	]	Hermetic	
ELECTRICAL					
Output Common Mode	Voltage, ± VDC	[4]	]	[4]	
Output Impedance,Nom	l	1225	Ω	1225	Ω
Operating Voltage		±3 to ±11	VDC	±3 to ±11	VDC
Operating Current (AOP	AON open), Max	35	mA Dc	35	mA Dc
Power Supply Rejection	Ratio	>65	dB	>65	dB

This family also includes:								
Model	Input Range (g)	Frequency response (Hz)	Sensitivity Differential, ±5% (mV/a)	Max.Shock (0.1ms)	Noise Differential (μg/√Hz)			
7603D2	±5	0-400	100	2000	12			
7603D3	±10	0-600	50	5000	18			
7603D4	±25	0-900	20	5000	25			
7603D5	±50	0-1200	10	5000	50			
7603D6	±100	0-1400	5	5000	100			
7603D7	±200	0-1750	2.5	5000	200			
7603D8	±400	0-2000	1.25	5000	400			

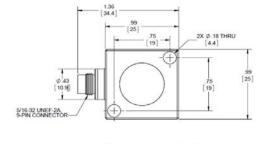
Refer to the performance specifications of the products in this family for detailed description.

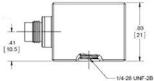
## Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting stud, Model 6360, 1/4-28 UNF-2A, Qty 1
- 3) Mounting stud, Model 6691, 1/4-28 UNF-2A to M6 X 1, Qty 1
- 4) Mounting screws, Model 69034A16, 8-32 x 1.0, Qty. 2
- 5) Mounting screws, Model 6687A1, M4x0.7 x 25mm, Qty. 2
- 6) Flat washers, Model 6754, Qty. 2

## Notes:

- [1] Single ended sensitivity is half of values shown. (Ref. at 100 Hz)
- [2] -90% to +90% of Full Scale.
- [3] Over the rated temperature range.
- [4] Bias voltage equal to (+v (-v)) / 2
- [5] In the interest of constant product improvement, we reserve the right to change specifications without notice.





Inits on the line drawing are in inches. Refer to 127-7603D for more information.

