



Model Number 7503D6	PERFORMANCE SPECIFICATION									DOC NO PS7503D6
	TRIAXIAL VARIABLE CAPACITANCE ACCELEROMETER								REV J, ECN 15137, 06/13/1	
·		This family also includes:								•
					Model	Input Range (g)	Frequency Response, ±3dB (Hz)	Sensitivity Differential, ±5% (mV/g)	Max.Shock (0.1ms) g (peak)	Noise Differential (µg/vHz)
• VARIABLE CAPACITANCE TECHNOLOGY					7503D1	±2	0-400	2,000	2000	10.5
	• ± 4V DIFFERENTIAL OUTPUT				7503D2	±5	0-800	800	2000	12
	• HERMETICALLY SEA	• HERMETICALLY SEALED • DC RESPONSE				±10	0-1000	400	2000	18
-	 DC RESPONSE 					±25	0-1500	160	2000	44
					7503D5	±50	0-2700	80	2000	69
					7503D7	±200	0-5000	20	2000	290
and a second sec					7503D8	±400	0-4000	10	2000	400
					7503D9	±5(X&Y), ±25(Z)	0-800(X&Y), 0-1500(Z)	800(X&Y), 160(Z)	2000	12(X&Y), 44(Z)
÷					7503D10	±5(X&Y), ±50(Z)	0-800(X&Y), 0-2700(Z)	800(X&Y), 80(Z)	2000	12(X&Y), 69(Z)
	ENGLISH SI				Refer to the performance specifications of the products in this family for detailed description.					
PHYSICAL	· · · · · · · · · · · · · · · · · · ·			1	Supplied Ac					
Veight, Max	1.3	oz	38	grams	1) Accredited	calibration certificate	e (ISO 17025)			
Connector Type	9-pin, 5/16-32 UNEF-2A		9-pin, 5/16-32 UNEF-2A		2) Mounting stud, Model 6360, 1/4-28 UNF-2A, Qty 1					
/laterial	Titanium Alloy		Titanium Alloy		3) Mounting stud, Model 6691, 1/4-28 UNF-2A to M6 X 1, Qty 1					
ensing Technology	MEMS		MEMS		4) Mounting screws, Model 6753A1, 8-32 x 1.0, Qty. 2					
					5) Mounting screws, Model 6687A1, M4x0.7 x 25mm, Qty. 2					
PERFORMANCE					6) Flat washe	ers, Model 6754, Qty.	2			
iput Range	±100	g	±981	m/s ²	Notes:					
requency Response (±5%)	0 - 800	Hz	0 - 800	Hz	[1] Single end	ded sensitivity is half	of values shown. (Ref. at 10	0 Hz)		
requency Response (±3dB)	0 - 2500	Hz	0 - 2500	Hz	[2] -90% to +9	90% of Full Scale.	,	,		
Resonant Frequency	>3000	Hz	>3000	Hz	[3] Over the rated temperature range.					
Sensitivity Differential, ±5% [1]	40	mV/g	4.1	mV/m/s ²	[4] Limit operating voltage to +24VDC when temperature is greater than 240°F (115°C).					
Dutput Noise, Differential ,Typ	122	μgrms/√ Hz	1,197	μ m/s ² /v Hz			uct improvement, we reserve			notice
Non-Linearity, Max [2]	0.5	% F.S	0.5	% F.S			o validate that a particular pr			
Cross Axis Sensitivity, Max	3	%	3	%	suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different					
Scale Factor Calibration Error, Max.	1	%	1	%	applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.					
	· · · · · · · · · · · · · · · · · · ·		· · · ·		each custome	er application by the o	customer's technical experts	i.		
Zero Measured Output	±50	mV	±50	mV			1.36			
							L	.99		
INVIRONMENTAL				. 2 .			Let .	.752	(Ø.18 THRU	
laximum Mechanical Shock (0.1 ms)	±2000	gpk	±19620	m/s ² peak				[19]	[4,4]	
			(ppm of span)/°C					T I		
as Calibration Error, Max 0.5 % of span 0.5 % of span			-					.99		
Operating Temperature Range [4]	-67 to +257	°F	-55 to +125	°C			φ.43 [10.9]		[19]	
Scale Factor Temperature Shift [3]	-111 to +111	ppm/°F	-200 to +200	ppm/°C						
Seal	Hermetic		Hermetic			5/1	6-32 UNEF-2A,		<u>·</u>]	
LECTRICAL										
Dutput Common Mode Voltage, Typ	2.5	VDC	2.5	VDC				I I		
Dutput Impedance	<10K	Ω	<10K	Ω						
Operating Voltage	+6 to +33	VDC	+6 to +33	VDC			· · · · · · · · · · · · · · · · · · ·	.83		
Operating Current (AOP &AON open), Max	35	mA Dc	35	mA Dc						
Power Supply Rejection Ratio	>65	dB	>65	dB			[10.5]			
Ground Isolation	>30	MΩ	>30	MΩ			+			
					Units on the line d	rawing are in inches. Refer to	127-7503D for more information.	1/4-28 UNF-2	B	
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INSTRUMENTS, INC.

21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880 www.dytran.com For permission to reprint this content, please contact info@dytran.com