

Model Number DOC NO PERFORMANCE SPECIFICATIONS 3713A3T PS3713A3T Triaxial Accelerometer, IEPE REV B, ECN 16541, 02/02/22



- HERMETICALLY SEALED
- CASE ISOLATED
- TEDS FEATURE

		ENGLISH		SI	
PHYSICAL					
Weight, Max.		1.8	oz	52	grams
Mounting		ø.195 Thru Hole		ø4.95mm Thru Hole	
Connector [1]		4-Pin		4-Pin	
Material		300 Series S.S.		300 Series S.S.	
Sensing Element	Material	Quartz		Quartz	
	Mode	Shear		Shear	
PERFORMANCE					
Sensitivity [2], ±10%		5.0	mV/g	0.51	mV/m/s ²
Acceleration Range		1,000	g pk	9810	m/s² pk
Frequency Range, (±5%)		1 to 3,000	Hz	1 to 3,000	Hz
Frequency Range, (±10%)		0.6 to 4,000	Hz	0.6 to 4,000	Hz
Frequency Range, (±3dB)		0.3 to 6,000	Hz	0.3 to 6,000	Hz
Resonance Frequency		>30	kHz	>30	kHz
Transverse Sensitivity		<6	%	<6	%
Electrical Noise Floor, Max.		0.02	g RMS	0.20	m/s ² RMS
Linearity [3]		± 1%	% F.S.	± 1%	% F.S.
ELECTRICAL					
Compliance Voltage		+18 to +30	VDC	+18 to +30	VDC
Current Range [4]		2 to 20	mA	2 to 20	mA
Output Impedance, Typ.		100	Ω	100	Ω
Output Bias Voltage		7.0 to 12.0	VDC	7.0 to 12.0	VDC
Discharge Time Constant		0.5 to 2.0	sec	0.5 to 2.0	sec
Ground Isolation		>1	GΩ	>1	GΩ
TEDS		IEEE 1451.4		IEEE 1451.4	
Base Strain Sensitivity		0.003	g/με	0.03	m/s²/με
ENVIRONMENTAL					
Maximum Shock		2,000	g pk	19,620	m/s ² pk
Operating Temperature		-320 to +302	°F	-195 to +150	°C
TEDS Operating Temperature		-40 to +185	°F	-40 to +85	°C
Seal		Hermetic		Hermetic	
1					

This family also includes:								
Model	Sensitivity (mV/g)	Range (g pk)	Time Constant (Sec)	Operating Temp (°F)				
3713A1T	1.0	5,000	0.8 to 2.0	-320 to +302				
3713A2T	0.5	10,000	0.8 to 2.0	-320 to +302				
3713A4T	10	500	0.3 to 2.0	-320 to +302				

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

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting screw, model 6543, 10-32 x .75" long, Qty. 1

Notes:

- [1] Mates with Glenair connector 800-006-16-Z16-4SN. Dytran cable model 6380AXX
- [2] Measured at 100Hz, per ISA RP 37.2.
- [3] Measure using zero-based straight line method, % of F.S. or any lesser range.
- [4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier. [5] In the interest of constant product improvement, we reserve the right to change specifications without notice.
- It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different

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.





