

MODEL NUMBER 3153A1T

PERFORMANCE SPECIFICATION

DOC NO.
PS3153A1T

Accelerometer, Triaxial, IEPE

REV C, ECN 15508, 01/13/2020



- HERMETICALLY SEALED
- STUD MOUNTED
- TEDS FEATURE
- GROUND ISOLATED

	ENGLISH	ENGLISH		SI	
PHYSICAL					
Weight, Max	1.23	oz	35	grams	
Connector [1] Type	4-pin, 3/8-28		4-pin, 3/8-28		
Mate	rial 300 Series S.S.		300 Series S.S.		
Housing Material	300 Series S.S.		300 Series S.S.		
Sensing Element	Ceramic		Ceramic		
Mode	e Shear		Shear		
Mounting Provision	10-32 Tapped Hole		10-32 Tapped Hole		
PERFORMANCE					
Sensitivity, +15-10% [2]	10	mV/g	1.02	mV/m/s ²	
Acceleration Range	± 500	Gpeak	±4905	m/s² peak	
Frequency Range, ±5%	0.7 - 5000	Hz	0.7 - 5000	Hz	
Resonance Frequency	>20	kHz	>20	kHz	
Linearity [3]	1	%F.S.	1	%F.S.	
Transverse Sensitivity Max	6	%	6	%	
Electrical Noise Floor, Max.	0.003	Grms	0.03	m/s ² rms	
ELECTRICAL					
Supply Current Range [4]	2 to 20	mA.	2 to 20	mA	
Compliance Voltage Range	+18 to +30	VDC	+18 to +30	VDC	
Output Impedance, Typ.	100	Ω	100	Ω	
Output Bias Voltage	11 - 13	VDC	11 - 13	VDC	
Discharge Time Constant	0.5 to 1.5	sec	0.5 to 1.5	sec	
TEDS Feature	IEEE 1451.4	sec	IEEE 1451.4	Sec	
TEBO F catalo	IEEE 1431.4		IEEE 1431.4		
ENVIRONMENTAL					
Shock Max	± 3000	g pk	± 29430	m/s ²	
Vibration Max	± 2000	g pk	± 19620	m/s ²	
Operating Temperature	-60 to +250	°F	-51 to +121	°C	
TEDS Operating Temperature	-40 to +185	°F	-40 to +85	°C	
Seal	Hermetic		Hermetic		
Magnetic Sensitivity at 100 Gauss	0.00007	g/Gauss	0.0006867	m/s²/Gauss	
Base Strain Sensitivity	0.05	g/με	0.4905	m/s²/με	
Electrical Isolation	10	мΩ	10	мΩ	

This family also includes	:
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Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC (sec)	
3153A2T	50	100	0.0006	-60 to +250	0.5 to 1.5	
3153A3T	100	50	0.0003	-60 to +250	0.5 to 1.5	

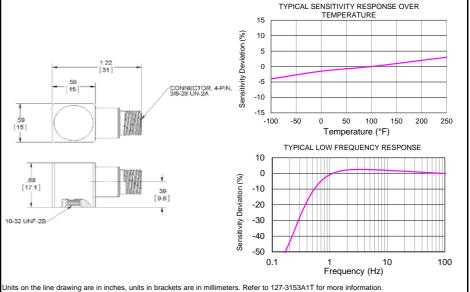
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Model 6200 Mounting Stud
- 2) Accredited Calibration Certificate (ISO 17025)

Notes:

- [1] Glass to Metal Seal connector. Mates with Dytran cable Model 6390AXX, 6381AXX, 6380AXX, & 60042AXX (XX=length in feet)
- [2] Measured At 100 Hz, 1 Grms per ISA RP 37.2
- [3] Linearity is % of specified full scale (or any less full-scale range), zero-based best fit straight line method.
- [4] Do not apply power to this device without current limiting, 20mA Max, to do so will destroy the integral IC amplifier
- [5] In the interest of constant product improvement, we reserve the rights to change the 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.





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