

3543A PERFORMANCE SPECIFICATION DOC NO PS3543A

Accelerometer, Triaxial, IEPE REV C, ECN 12996, 10/14/16



- GROUND ISOLATED
- HERMETICALLY SEALED
- STUD MOUNT

		ENGLISH		SI	
PHYSICAL					
Weight, Max.		0.5	oz	15	grams
Mounting		10-32 Stud Mount		10-32 Stud Mount	
Connector [1]	Type	4-pin		4-pin	
	Material	Titanium		Titanium	
Housing	Material	Titanium		Titanium	
	Isolation	Case Isolated		Case Isolated	
Sensing Element	Material	Piezoelectric		Piezoelectric	
	Element	Shear		Shear	
PERFORMANCE			-		-
Sensitivity, ±10% [2]		100	mV/g	10.2	mV/m/s^2
Acceleration Range, ±		50	Gpeak	491	m/s ² peak
Frequency Range, ±5%		2 to 2000	Hz	2 to 2000	Hz
Frequency Range, ±10%		1.3 to 3000	Hz	1.3 to 3000	Hz
Frequency Range, ±15%		1 to 5000	Hz	1 to 5000	Hz
Resonance Frequency		>25	kHz	>25	kHz
Linearity [3]		±1	% F.S.	±1	% F.S.
Transverse Sensitivity, Max.		6	%	6	%
Noise floor		0.0008	Grms	0.008	m/s ² rms
Spectral Noise	1Hz	300	μGrms/√(Hz)	2943	um/s2 rms/v(Hz)
	10Hz	60	μGrms/√(Hz)	588.6	µm/s² rms/√(Hz)
	100Hz	20	μGrms/√(Hz)	196.2	µm/s2 rms/v(Hz)
	1000Hz	10	μGrms/√(Hz)	98	um/s ² rms/v(Hz)
	10000Hz	10	μGrms/√(Hz)	98	µm/s ² rms/v(Hz)
ELECTRICAL					1 .
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 +7 to +9	Ω VDC	100 +7 to +9	Ω VDC
Output Bias Voltage Discharge Time Constant		0.25 to 2.0	sec	0.25 to 2.0	sec
Ground Isolation		0.25 t0 2.0	GΩ	≥10	GO.
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ENVIRONMENTAL			_		_
Shock Max.		1500	g pk	14715	m/s ²
Vibration Max.		500	g pk	4905	m/s ²
Operating Temperature		-60 to +320	°F	-51 to +160	°C
Seal		Hermetic		Hermetic	
Base Strain Sensitivity		0.002	g/με	0.02	m/s²/με
			-	-	•

This family also includes:									
Model	Sensitivity (mV/g)	Range (Gpeak)	Noise Resolution (Grms)	Temp Range (°F)	Time Constant (sec)				

Please 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 6200, (10-32 to 10-32).

Notes:

- [1] Glass to Metal Seal connector. Mates with Dytran cable Model 6967AXX (XX=length in feet).
- [2] Measured At 100 Hz, 1 Grms per ISA RP 37.2.
- [3] Measured using zero-based best 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.



