Model Number 9106C01

DOUBLE-ENDED TRANSFER STANDARD ACCELEROMETER SYSTEM

Revision: NR

ECN #:

ACCELEROMETER SYSTEM				
PERFORMANCE	English	<u>SI</u>		
Sensitivity (±2.0%)	100 mV/g	10.2 mV/(m/s ²)	1	
Measurement Range	±50 g pk	±490 m/s² pk		Typical Sensitivity Deviation vs Temperature
Frequency Range (±5%)	0.5 to 10,000 Hz	0.5 to 10,000 Hz		Typical sensitivity Deviation vs Temperature 10 5 0 5 -10 -10 -70 -30 10 -70
Frequency Range (±10%)	0.3 to 14,000 Hz	0.3 to 14,000 Hz		
Frequency Range (±3 dB)	0.2 to 20,000 Hz	0.2 to 20,000 Hz		ä
Resonant Frequency	≥35 kHz	≥35 kHz		· · · · · · · · · · · · · · · · · · ·
Broadband Resolution (1 to 10000 Hz)	0.004 g rms	0.039 m/s² rms	[1]	
Non-Linearity	≤1 %	≤1 %	[2]	<u>ک</u> ۔5-
Transverse Sensitivity	≤3 %	≤3 %	r_1	
ENVIRONMENTAL				
Overload Limit (Shock)	±5000 g pk	±49050 m/s² pk		ភ្លឺ -70 -30 10 50 90 130 170 210 250
Temperature Range (Operating)	-65 to +250 °F	-54 to +121 °C		*
Temperature Response	See Graph	See Graph	[1]	Temperature (^e F)
ELECTRICAL	occ araph	See alaph	[,]	
Excitation Voltage	23 to 30 VDC	23 to 30 VDC		
Constant Current Excitation	2 to 20 mA	2 to 20 mA		LASER PRIMARY CALIBRATION UNCERTAINTY
Dutput Impedance	<100			
Dutput Impedance Dutput Bias Voltage	11 to 17 VDC	<100		MCS-A065 Mid Frequency with K394A31 airbearing shaker.
Discharge Time Constant	2.0 to 5.0 sec	11 to 17 VDC		Calibration data acquired from 5 to 10 kHz at 10 pts/decade plus 159 H
		2.0 to 5.0 sec		Even and the sector time a conversion factor of k. Or
Setting Time (Within 10% of Bias)	<12.0 sec	<12.0 sec	741	Expanded uncertainties using a coverage factor of k=2:
Spectral Noise (10 Hz)	65 μg/√Hz	638 (µm/sec ²)/√Hz	[1]	5 Hz 1%
Spectral Noise (100 Hz)	20 µg/√Hz	196 (µm/sec²)/√Hz	[1]	(5 < f < 100) Hz 0.5%
Spectral Noise (1 kHz)	15 μg/√Hz	147 (µm/sec²)/√Hz	[1]	100 Hz,159 Hz 0.2%
PHYSICAL				$(159 < f \le 1000) Hz \qquad 0.5\%$
Sensing Element/Geometry	Quartz/Shear	Quartz/Shear		$(1000 < f \le 5000)$ Hz 0.7%
Housing Material	316L Stainless Steel	316L Stainless Steel		$(5000 < f \le 10000)$ Hz 1.5%
Sealing	Welded Hermetic	Welded Hermetic		f represents calibration frequency
Size (Hex x Height)	1 3/16 in x 1 1/2 in	30.2 mm x 38.1 mm		
Veight	6.2 oz	176 gm	[1]	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack		NOTES SUPPLIED ACCESSORIES
electrical Connector Position	Side	Side		[1] Typical. 003C03 Sensor Cable (1)
Nounting Thread	1/4-28 Female	1/4-28 Female		[2] Zero-based, least squares, straight line method. 012A03 Output Cable (1)
CP® SIGNAL CONDITIONER				[3] Supplied external DC power supply 488B04. 9101C Mounting Kit - Assorted Studs (1)
/oltage Gain (±1%)	1:1	1:1		[4] With ≥ 1M ohm input impedance of readout MCS-A065 Primary Calibration 5-10 kHz
ow Frequency Response (-5%)	<0.1 Hz	<0.1 Hz		device.
Iniversal Input Power	100-240 VAC; 50-60 Hz	100-240 VAC; 50-60 Hz	[3]	
Discharge Time Constant (0 to +50%)	10 sec	10 sec	[4]	
Electrical Connectors (Input, Output)	BNC Jack	BNC Jack	נייז	
	t room temperature unless other			
		wise specified.		Droject Engineery Droduct Monagory Mild Team Londery One Number
\mathbb{CP}^{\otimes} is a registered trademark of PCB Piezotronics, Inc				Project Engineer: Product Manager: Mkt Team Leader: Spec Number
n the interest of constant product improvement, specifications may change without notice.			Date: 7-5-11 Date: 7/5/11 Date: 7/5/11	
THE MODAL SH		rohub Boulevard ti, OH 45215, USA		D0-860-4867 Fax (513) 458-2172 info@modalshop.com 13-351-9919 SAM-F020 revNR 04/04/03