

Model Number
301A03

QUARTZ ICP® REFERENCE STANDARD ACCELEROMETER

Revision: G
ECN #: 18515

DYNAMIC PERFORMANCE

Voltage Sensitivity	mV/g [mV/(ms ⁻²)]	10 [1,02]	(±10%)
Measurement Range (for ±5V output)	±g pk [±ms ⁻² pk]	500 [4 905]	
Frequency Range: (±2%)	Hz	10 to 5,000	
(±5%)	Hz	1 to 5,000	
Mounted Resonant Frequency	kHz	60	[1]
Broadband Resolution (1 Hz to 10 kHz)	g rms [ms ⁻² rms]	0.01 [0,98]	[1]
Amplitude Linearity	%	≤± 0.5	[2]
Transverse Sensitivity	%	≤ 3	

ENVIRONMENTAL

Operating Temperature Range	°F [°C]	-65 to 150 [-54 to +66]
Temperature Coefficient of Sensitivity	%/°F [%/°C]	≤0.03 [≤0,054]

ELECTRICAL

Excitation Voltage/Constant Current	VDC/mA	18 to 28/2 to 20
Output Impedance	ohms	<100
Output Bias	VDC	8 to 12
Discharge Time Constant	sec	0.5 to 2.0

MECHANICAL

Sensing Element	material/geometry	Quartz/Compression	
Housing	material/sealing	Stainless Steel/Welded	
Size	in [mm]	1 x 1.5 [25,4 x 38,1]	
Weight	oz [gm]	4.6 [130]	[1]
Electrical Connector	type/location	10-32 Coaxial Jack/Side	
Mounting Thread: Standard	size	10-32 UNF	
Unit Under Test	size	10-32 UNF	
Mounting Torque	in-lb [N-cm]	10-20 [113-225]	

OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted by the letter prefixes below. More than one option may be used.

- M** - Metric Mount
Calibration Based on 1,02 mV/(ms⁻²)
Reference Sensitivity Measured at 159 Hz
Mounting Thread: Standard size 10-32
Unit Under Test size M5 x 0.8

Modify Accessories

(2) Model M081B23 Stud replaces (2) Model 081A08

NOTES:

- [1] Typical.
[2] Zero-based, least-squares, straight line method.

SUPPLIED ACCESSORIES:


Model 081B05 Mounting Stud (2)
Model 081A08 Mounting Stud (2)
NIST Traceable Calibration Certificate 5 Hz to 5 kHz

All specifications are at room temperature unless otherwise specified.

In the interest of constant product improvement, we reserve the right to change specifications without notice.

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