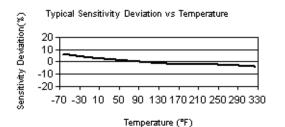
Model	Number
TLD3	39A36

# TRIAXIAL ICP® ACCELEROMETER

Revision: B ECN #: 52366

Performance	ENGLISH	SI	
Sensitivity(± 10 %)	10 mV/g		
Measurement Range	± 500 g pk	$\pm 500 \text{ g pk}$ $\pm 4,900 \text{ m/s}^2 \text{ pk}$	
Frequency Range(± 5 %)	2 to 5,000 Hz	2 to 5,000 Hz	
Frequency Range(± 10 %)	1 to 8,000 Hz	1 to 8,000 Hz	
Resonant Frequency	≥ 35 kHz	≥ 35 kHz	
Filter Type(single pole)	Low Pass	Low Pass	
Electrical Filter Roll-off	6 dB/octave	6 dB/octave	
Electrical Filter Corner Frequency	> 13 kHz	> 13 kHz	
Broadband Resolution(1 to 10,000 Hz)	.003 g rms	.029 m/sec²rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
TEDS Compliant(Per IEEE 1451.4)  Environmental	Yes	Yes	
Overload Limit(Shock)	± 5,000 g pk	$\pm 49,000 \text{ m/s}^2 \text{ pk}$	
Temperature Range(Operating)	-65 to 325 °F	-54 to 163 °C	
Temperature Response	See Graph	See Graph	[1]
Temperature Coefficient of Sensitivity	03 %/°F	06 %/°C	[1]
Base Strain Sensitivity	.001 g/με	.0098 (m/s²)/με	[1]
Electrical	у, ре	, o ,, po	1.1
Excitation Voltage	21 to 30 VDC	21 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 200 Ohm	≤ 200 Ohm	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC	
Discharge Time Constant	.3 to 1.1 sec	.3 to 1.1 sec	
Settling Time(within 10% of bias)	< 5 sec	< 5 sec	
Spectral Noise(1 Hz)	2,080 μg/√Hz	20,405 (μm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(10 Hz)	250 μg/√Hz	2,453 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(100 Hz)	50 μg/√Hz	491 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(1 kHz)	20 μg/√Hz	196 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(10 kHz)	19 μg/√Hz	186 (µm/sec <sup>2</sup> )/√Hz	[1]
Physical			
Sensing Element	Quartz	Quartz	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	0.55 in x 0.80 in x 0.55 in	14.0 mm x 20.3 mm x 14.0 mm	
Weight	0.37 oz	10.5 gm	[1]
Electrical Connector	1/4-28 4-Pin	1/4-28 4-Pin	6.3
Electrical Connection Position	Side	Side	
Mounting Thread	5-40 Female	5-40 Female	
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**(**E<sub>[3]</sub>



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. ICP® is a registered trademark of PCB Piezotronics, Inc.

### **OPTIONAL VERSIONS**

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

**T** - TEDS Capable of Digital Memory and Communication Compliant with IEEE P1451.4

TLA - TEDS LMS International - Free Format

**TLB** - TEDS LMS International - Automotive Format

**TLC** - TEDS LMS International - Aeronautical Format

#### **NOTES:**

[1]Typical.

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

[3]See PCB Declaration of Conformance PS023 for details.

## **SUPPLIED ACCESSORIES:**

Model 080A109 Petro Wax (1)

Model 080A145 Adhesive Mounting Base (1)

Model 080A90 Quick Bonding Gel (1)

Model 081A27 Mounting Stud (5-40 to 5-40) (1)

Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)

Model M081A27 Metric mounting stud, 5-40 to M3 x 0.50 long (1)

Entered: ND	Engineer: DK	Sales: KK	Approved: BAM	Spec Number:
Date: 12/01/2021	Date: 12/01/2021	Date: 12/01/2021	Date: 12/01/2021	60891



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