

Model Number
TLD339A37

TRIAxIAL ICP® ACCELEROMETER

Revision: A
ECN #: 50412

	ENGLISH	SI	
Performance			
Sensitivity(± 10 %)	100 mV/g	10.2 mV/(m/s ²)	
Measurement Range	± 50 g pk	± 490.5 m/s ² pk	
Frequency Range(± 5 %)	0.3 to 4,000 Hz	0.3 to 4,000 Hz	
Frequency Range(± 10 %)	0.2 to 7,000 Hz	0.2 to 7,000 Hz	
Resonant Frequency	≥ 35 kHz	≥ 35 kHz	
Filter Type	single pole	single pole	
Electrical Filter Roll-off	20 dB/decade	20 dB/decade	
Electrical Filter Corner Frequency	≥ 15 kHz	≥ 15 kHz	
Broadband Resolution(1 to 10,000 Hz)	0.002 g rms	0.019 m/s ² rms	[1]
Phase Response(± 5 °)(at 70°F [21°C])	3 to 2,000 Hz	3 to 2,000 Hz	
Non-Linearity	≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
TEDS Compliant(Per IEEE 1451.4)	Yes	Yes	
Environmental			
Overload Limit(Shock)	± 5,000 g pk	± 49,000 m/s ² pk	
Temperature Range(Operating)	-65 to 356 °F	-54 to 180 °C	
Temperature Response	See Graph	See Graph	[1]
Temperature Coefficient of Sensitivity	≤ 0.011 %/°F	≤ 0.020 %/°C	[1]
Base Strain Sensitivity	.001 g/με	.0098 (m/s ²)/με	[1]
Electrical			
Excitation Voltage	21 to 30 VDC	21 to 30 VDC	
Constant Current Excitation	2 to 4 mA	2 to 4 mA	[3]
Output Impedance	≤ 200 Ohm	≤ 200 Ohm	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC	
Discharge Time Constant	2 to 6 sec	2 to 6 sec	
Settling Time(within 10% of bias)	< 30 sec	< 30 sec	
Spectral Noise(1 Hz)	210 μg/√Hz	2,060 (μm/sec ²)/√Hz	[1]
Spectral Noise(10 Hz)	40 μg/√Hz	392 (μm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	20 μg/√Hz	196 (μm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)	12 μg/√Hz	118 (μm/sec ²)/√Hz	[1]
Spectral Noise(10 kHz)	10 μg/√Hz	98 (μm/sec ²)/√Hz	[1]
Physical			
Sensing Element	UHT-12™	UHT-12™	
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	
Electrical Connection Position	Side	Side	
Mounting Thread	5-40 Female	5-40 Female	

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.

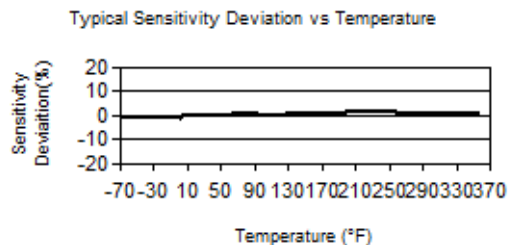
TLB - TEDS LMS International - Automotive
Format

NOTES:

- [1] Typical.
- [2] Zero-based, least-squares, straight line method.
- [3] Increased current up to 20mA acceptable to 250F (121C)
- [4] 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)



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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Entered: LK	Engineer: BAM	Sales: JC	Approved: BAM	Spec Number:
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