



A/123/TB.XX

Mono-axial IEPE accelerometer

IEPE, Top Entry 10-32 Microdot Connector, 5-40 UNC Tapped Base

KEY FEATURES

- ✓ Titanium case
- ✓ 4.4 grams
- ✓ 5 standard sensitivity options; 1mV/g to 100mV/g

INCLUDED WITH DEVICE

- ✓ SM/05 Mounting Stud

DEVICE / FAMILY OPTIONS

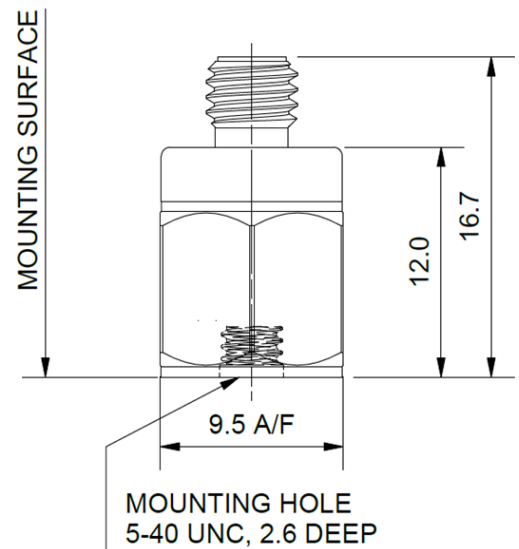
- ✓ A/123/TB.XXET - Extended temperature variant to 165°C
- ✓ A/123/TB.XXT - Transducer Electronic Datasheet (TEDS)
- ✓ Extended low & high frequency calibration
- ✓ Custom sensitivities available on request
- ✓ Alternative/additional stud options

- A/123/E Side Entry 10-32 Microdot, adhesive mount
- A/123/TE Top Entry 10-32 Microdot, adhesive mount
- A/123/EB Side Entry 10-32 Microdot, 5-40 UNC tapped base
- A/123/TB Top Entry 10-32 Microdot, 5-40 UNC tapped base
- A/123/E-1 Side Entry 10-32 Microdot, ceramic isolated adhesive mount
- A/123/TE-1 Top Entry 10-32 Microdot, ceramic isolated adhesive mount

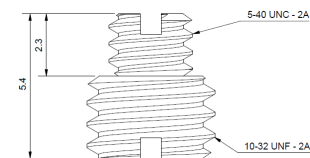
TYPICAL CABLE OPTIONS

- ✓ MP2/BC1/S18/30 - Microdot to BNC, FEP jacket, co-axial, 3 meters
- ✓ MP2/MP2/S18/30 - Microdot to Microdot, FEP jacket, co-axial, 3 meters
- ✓ Other options and lengths available

A/123/TB ACCELEROMETER DIMENSIONS



SM/05 MOUNTING STUD DIMENSIONS

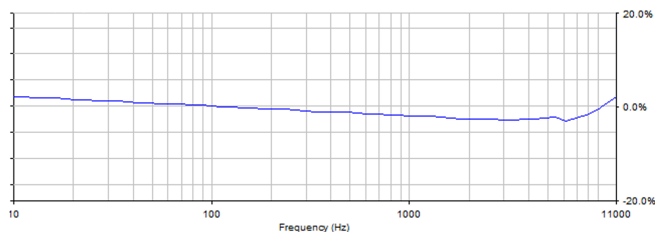


All measurements in millimeters (mm)

TECHNICAL SPECIFICATIONS

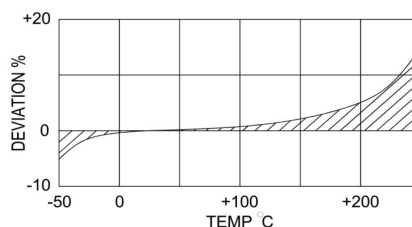
Performance	A/123/TB.1	A/123/TB.5	A/123/TB.10	A/123/TB.30	A/123/TB.100
Voltage Sensitivity ($\pm 10\%$)	1mV/g	5mV/g	10mV/g	30mV/g	100mV/g
Measurement Range	$\pm 5000g$	$\pm 1000g$	$\pm 500g$	$\pm 160g$	$\pm 50g$
Frequency Response ($\pm 5\%$)	1Hz to 10kHz				
Frequency Response ($\pm 10\%$)	0.7Hz to 11kHz				
Resonant Frequency	$\geq 50kHz$				
Cross Axis Error	$\leq 5\%$				
Maximum Shock Limit	5000g				
Non-linearity (% FS)	$\leq 1\%$				
Base Strain Sensitivity	$\leq 0.001g/\mu\epsilon$				
Broadband Resolution	0.0009grms (100mV/g)				
Electrical Characteristics					
Supply Voltage	15V to 35V DC				
Supply Current	2mA to 20mA (max 2mA above 125°C)				
Bias Voltage	10V to 14V DC				
Output Impedance	$\leq 100\Omega$				
Base Isolation Impedance	N/A				
Settling Time Constant	<5 seconds				
Physical					
Case Material	Titanium				
Connector	Top Entry, 10-32 UNF Microdot				
Mounting	2.6mm 5-40 UNC Tapped Base				
Recommended Mounting Torque	0.8Nm				
Weight	4.4 grams				
Size (mm)	9.5mm (A/F) x 16.7mm				
(Inches)	0.37 " (A/F) x 0.47 "				
Environmental					
Temperature Range (°C)	-50°C to +125°C (Extended temperature option to 165°C)				
(°F)	-58°F to +257°F (Extended Temperature option to 329°F)				
Total Mass Loss (TML)	<0.1%				

TYPICAL FREQUENCY RESPONSE



TYPICAL THERMAL RESPONSE

Response shows performance of piezoelectric sensing element, including beyond the stated operating limits.



TYPICAL SPECTRAL NOISE (100mV/g)

1 Hz - 522 $\mu g/\sqrt{Hz}$
 10 Hz - 31.2 $\mu g/\sqrt{Hz}$
 100 Hz - 8.9 $\mu g/\sqrt{Hz}$
 1 kHz - 5.8 $\mu g/\sqrt{Hz}$
 10 kHz - 4.2 $\mu g/\sqrt{Hz}$

DJB INSTRUMENTS UK LIMITED

e: sales@djbinstruments.com

t: +44 (0) 1638 712288

w: djbinstruments.com



ISO 9001 - 00025363



SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

ALL DEVICES CALIBRATED IN ACCORDANCE WITH BS ISO 16063-21:2003. ALL DEVICE CALIBRATIONS ARE UKAS TRACEABLE.