

A/124/E-1.XX

Mono-axial IEPE accelerometer

IEPE, Side Entry M3.5 Connector, Adhesive Mount



KEY FEATURES

- ✓ Titanium case
- ✓ Ceramic isolated base
- ✓ 2.1 grams
- ✓ 5 standard sensitivity options; 1mV/g to 100mV/g

DEVICE / FAMILY OPTIONS

- ✓ A/124/E-1.XXET - Extended temperature variant to 165°C
- ✓ A/124/E-1.XXT - Transducer Electronic Datasheet (TEDS)
- ✓ Extended low & high frequency calibration
- ✓ Custom sensitivities available on request
- ✓ Alternative/additional stud options

A/124/E Side Entry M3.5 connector, adhesive mount

A/124/TE Top Entry M3.5 connector, adhesive mount

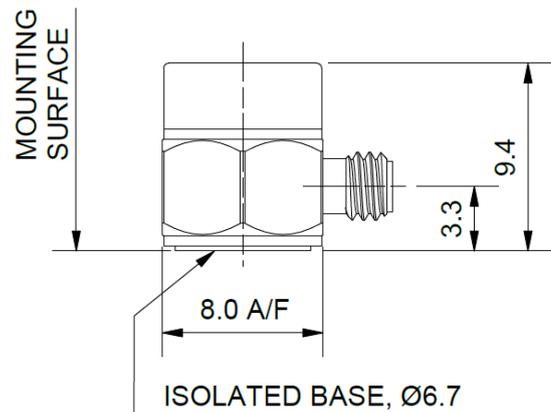
A/124/E-1 Side Entry M3.5 connector, ceramic isolated adhesive mount

A/124/TE-1 Top Entry M3.5 connector, ceramic isolated adhesive mount

TYPICAL CABLE OPTIONS

- ✓ KP/BC1/S11/30 - M3.5 to BNC, FEP jacket, co-axial, 3 meters
- ✓ KP/M1/S11/30 - M3.5 to Microdot Plug, FEP jacket, co-axial, 3 meters
- ✓ KP/MS1/S11/30 - M3.5 to Microdot Socket, FEP jacket co-axial, 3 meters
- ✓ Other options and lengths available

A/124/E-1 ACCELEROMETER DIMENSIONS

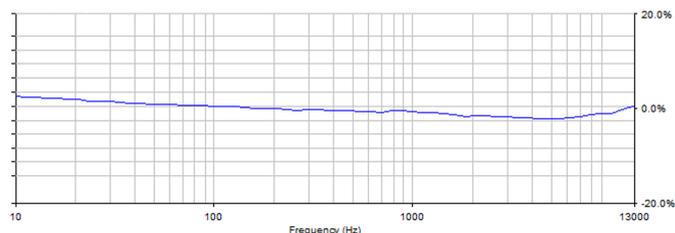


All measurements in millimeters (mm)

TECHNICAL SPECIFICATIONS

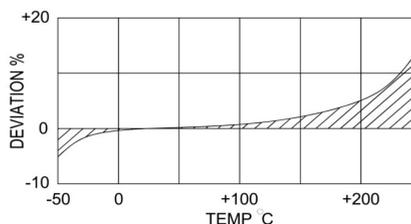
Performance	A/124/E-1.1	A/124/E-1.5	A/124/E-1.10	A/124/E-1.30	A/124/E-1.100
Voltage Sensitivity ($\pm 10\%$)	1mV/g	5mV/g	10mV/g	30mV/g	100mV/g
Measurement Range	$\pm 5000g$	$\pm 1000g$	$\pm 500g$	$\pm 160g$	$\pm 50g$
Frequency Response ($\pm 5\%$)	1Hz to 11kHz				
Frequency Response ($\pm 10\%$)	0.7Hz to 13kHz				
Resonant Frequency	$\geq 70kHz$				
Cross Axis Error	$\leq 5\%$				
Maximum Shock Limit	5000g				
Non-linearity (% FS)	$\leq 1\%$				
Base Strain Sensitivity	$\leq 0.001g/\mu\epsilon$				
Broadband Resolution	0.002grms (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	$> 100M\Omega$				
Settling Time Constant	< 5 seconds				
Physical					
Case Material	Titanium				
Connector	Side Entry, M3.5				
Mounting	Adhesive, ceramic isolated base				
Recommended Mounting Torque	N/A				
Weight	2.1 grams				
Size (mm)	8.0mm (A/F) x 9.4mm				
(Inches)	0.31" (A/F) x 0.37"				
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 - 345 $\mu g/\sqrt{Hz}$
 10 Hz - 42.8 $\mu g/\sqrt{Hz}$
 100 Hz - 11.2 $\mu g/\sqrt{Hz}$
 1 kHz - 5.67 $\mu g/\sqrt{Hz}$
 10 kHz - 5.2 $\mu g/\sqrt{Hz}$

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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.