DJB Instruments
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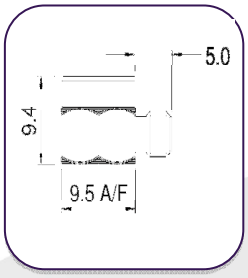
A/123/E/ S/ TE/ TS Piezo-tronic Voltage Accelerometer

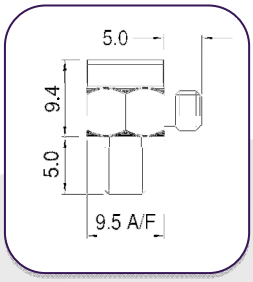
10, 100mV/g **2.5/ 3.5gm** **STD +125 °C (HT 185°C)**

The A/123 range of Piezo-tronic accelerometers includes a hybrid QVC, packaged to offer choice of side/top entry connector, integral stud or flat base (for adhesive mounting). Applications including modal analysis of lightweight structures and shock measurements are subject to individual phase/gain errors associated with the lower corner frequency of the QVC's. The radiometric nature of the modal analysis however reduces transfer function uncertainty to the associated lower corner frequency variations of individual QVC's. Thus a +/-5% corner frequency tolerance associated a +/- 1/2 degree phase tolerance at the nominal corner frequency. Peak shock of up to 600g (4.5Vpk. O/P limit) can be measured, with certain provisos relating to bandwidth response characterized by a single low frequency pole air, giving rise time. Droop will be 10% of peak value for 20m.sec. Rectangular pulses, for QVC corner frequency = 0.7Hz. Overshoot caused by ringing will be 10% for rise time 30µSec. and if excessive may lead to signal clipping.
NOTE: Voltage sensitivities shown are standard. We offer a wide range of sensitivities on request, and recommend that applications are evaluated to determine the requisite sensitivity.

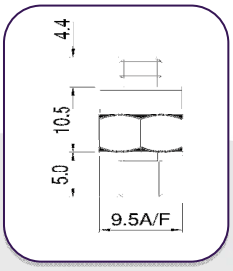
A/123/E



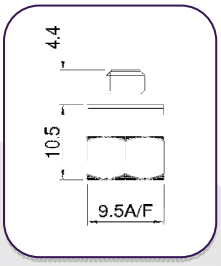
A/123/S

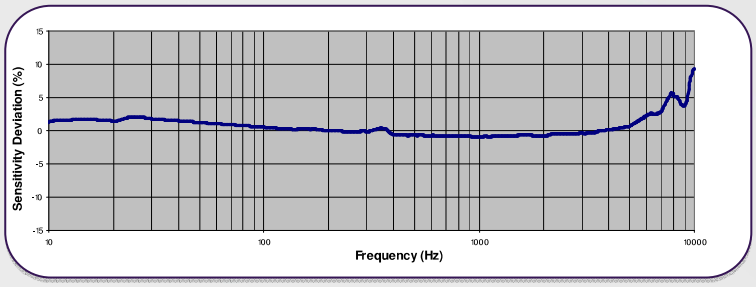


A/123/TS



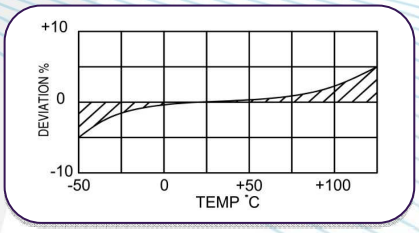
A/123/TE



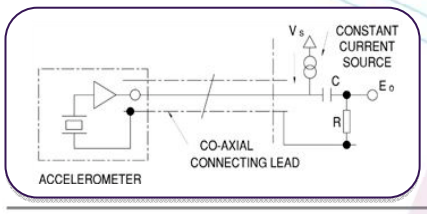


Typical Frequency Response

Conversion Mode	KONIC / 2 WIRE QVC		
Voltage Sensitivity mV/g	10, 100		
Resonant frequency kHz	≈ 50		
Cross Axis error % max	5		
Temperature Range °C	-50/+185		
Voltage sensitivity deviation re 20 °C	-5% @ 50 +5% @ +125 +/- 10% @ +185		
Supply voltage V	15/ 35 standard		
Supply voltage mA	2/15		
Bias voltage v	8/10		
Settling time to 90% final val. secs	<1		
Max continuous accn. G sine	1000		
Saturation limit g	500/750		
Noise level, equiv. mg	3		
Frequency Response	1Hz-8KHz		
L.F corner frequency, Hz	7	7	5
Case material	st/ steel, 303 S31		
Mounting	A/123/E,TE Adhesive A/123/S, TS M5 x 7mm Int Stud		
Weight gm	A/123/E,TE 2.5, A/123/S, TS 5.5		
Case seal	Welded		



Temperature Response



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