

# Piezo-electric accelerometer

# A/23/SI



8pC/g nom. • 10gm wt. • 250°C max temp.  
isolated output

The basic A/23 sensing element is electrically isolated from the transducer case, signal outlet being via an insulated side entry Microdot socket.

Signal isolation minimises ground loop interference in electrically noisy environments. Incorporating this feature within the transducer maximises mechanical integrity and bandwidth relative to external isolation methods.

The socket is insulated by means of an annular glass sleeve.

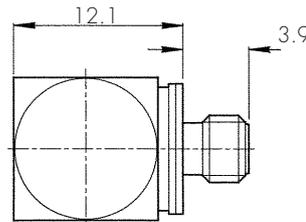
Overtightening the mating connector will damage the sleeve. Failure torque is around 1.5Nm., recommended connector tightening torque is 30cNm.max.

Ground loop rejection is a function of insulation resistance of the ceramic sleeve which, together with the resistance of the transducer cable screen, forms a ground loop signal attenuator. Typically, a 1mV differential applied via a 100 metre length screened cable will introduce the equivalent of 1g to an A/23 based system, reducing in the case of the A/23/SI by the ratio of the cable screen resistance (60 ohms) to the sleeve resistance (initial value > 10<sup>8</sup> ohms).

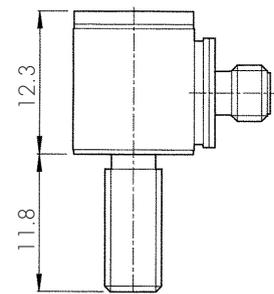
## options

- > wideband temperature calibration -50/+250°C
- > close tolerance output

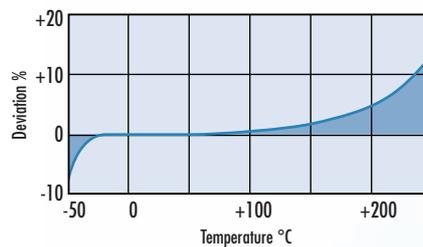
A/23/SI



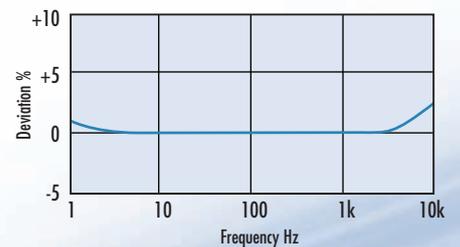
dims. mm



### TEMPERATURE RESPONSE



### FREQUENCY RESPONSE



### CONVERSION MODE

### KONIC

Charge sensitivity pC/g	6/10
Capacitance pF	800/1300
Resonant frequency kHz	30
Cross axis error % max	5
Temperature range °C	-50/+250
Charge sensitivity deviation re 20°C	-5 % @ -50°C +15 % @ +250°C
Pyro-electric output, g/°C	0.15
Pyro-electric corner freq. Hz	0.005
Base strain sens. g/μ strain	< 0.01
Max continuous accn. g sine	1000
Max shock g pk., rise time μ sec.	2000, 50
Case material	s/steel 303 S31
Mounting	integral stud 10/32 UNF thd. x 12 mm lg.
Weight gm	10
Connector	Microdot skt.10/32 UNF thd.
Mounting torque Nm	1
Connector torque load, cNm max	30
Connector/case insul. resce., ohms	> 10 <sup>8</sup>
Case seal	welded