## AIM9



## 1-axis Acceleration sensor

## Features and benefits

- Single crystal silicon based
- 1-axis acceleration measurement
- Ultra low cross axis sensitivity due to HARMS technology
- Over damped frequency response
- Low noise
- Excellent reliability against overload

## **PERFORMANCE DATA** (capacitive sensor element)

Parameter <sup>1)</sup>	Conditions	Min.	Typ. <sup>2)</sup>	Max.	Units
Measurement range			± 0.5		g
Sensitivity	full scale	1500	1600	1700	fF/g
Sensitivity <sup>3)</sup> temperature error					%/K
Zero-g Offset <sup>3)</sup> temperature error					fF/K
Capacitance C <sub>0</sub>		4300	4450	4650	fF
Total Capacitance	Parasitic Capacitance		18.5		pF
Cross axis sensitivity	x/y- versus z-direction		700:1		
Nonlinearity <sup>3)</sup>					%
Frequency response -3 dB		120	130	140	Hz
Recommended max. measuring voltage	RMS		1.1		V
Noise density	Calculated	2.9	3.1	3.3	µg/√Hz
Shock survival	Bare chip	2000			g
Dimensions	L x W x H		4.20 x 3.70 x 0.73		mm

1) Unless stated otherwise the performance data are for room temperature.

2) Typical specifications are not guaranteed.

3) Characterization in progress