

Dual-Axis Accelerometer

CAS200



Actual size

Key features

- Small (10.4 x 6.0 x 2.2mm)
- Excellent bias repeatability over temperature
- Dual-axis MEMS accelerometer in a hermetically sealed ceramic LCC surface mount package for temperature and humidity resistance
- Five dynamic range options; $\pm 0.85g$, $\pm 2.5g$, $\pm 10g$, $\pm 30g$, $\pm 96g$
- Analogue and digital (SPI®) outputs for linear acceleration and temperature
- Wide bandwidth (typically 170Hz digital, 250Hz analogue)
- Temperature range -40 to +125°C
- Low power consumption (3mA Typ) from a 3.3V supply
- Integral temperature sensor
- RoHS compliant

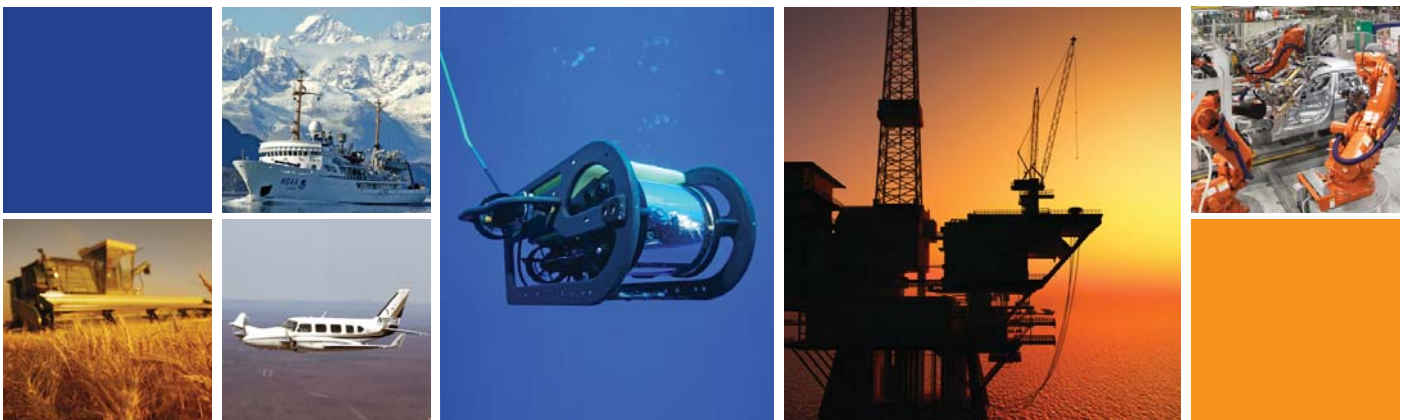
CAS290



Actual size

Typical applications

- Aerospace and industrial
- Aircraft AHRS and controls
- Platform stabilisation
- Drilling guidance
- Surveying and mapping
- Land and marine navigation
- Transportation
- Inertial measurement units
- Levelling and tilt sensing

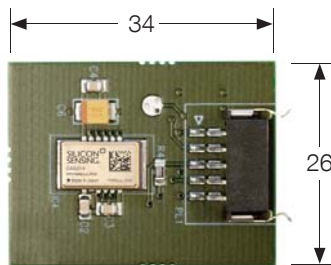
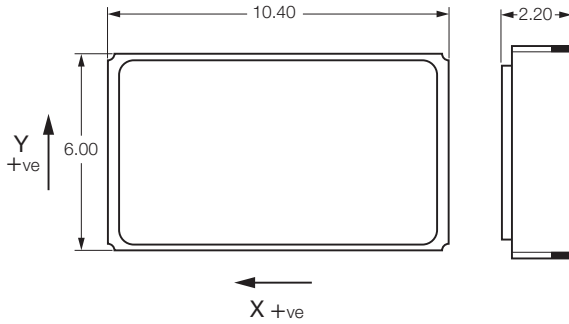


Dual-Axis Accelerometer

For full technical datasheets please go to our website where the documents can be downloaded

CAS20x

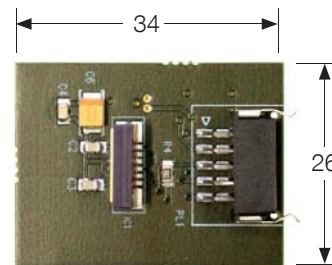
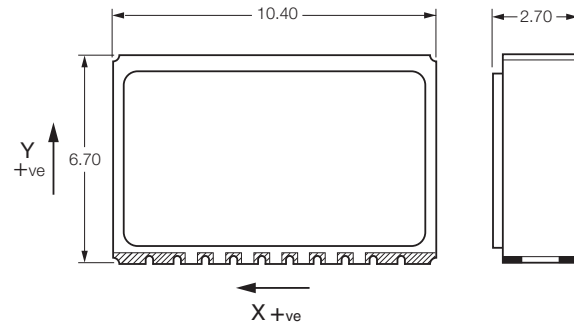
All dimensions in millimetres



Gemini™ Evaluation Board - CAS200 (P/N CAS21x-0302)

CAS29x

All dimensions in millimetres



Gemini™ Evaluation Board - CAS290 (P/N CAS29x-0302)

Parameter	Specification				
Number of sense axes	2-axis				
Ordering Part Number	CAS211	CAS212	CAS213	CAS214	CAS215
	CAS291	CAS292	CAS293	CAS294	CAS295
Dynamic range	±0.85g	±2.5g	±10g	±30g	±96g
SF over temperature	1.2% (Digital), 1.5% (Analogue)				
SF non-linearity	0.5%	0.5%	2.0%	2.0%	2.0%
Bias run to run @ +25°C	0.35mg	0.75mg	0.75mg	3.0mg	8.0mg
Noise spectral density	50µg/√Hz	150µg/√Hz	150µg/√Hz	350µg/√Hz	1,200µg/√Hz
Vibration rectification (20Hz to 2KHz)	0.15mg/g² @ 0.5gms	0.15mg/g² @ 2.0gms	0.15mg/g² @ 8.0gms	0.1mg/g² @ 12gms	0.1mg/g² @ 12gms
Supply voltage	2.7V ~ 3.6V				
Current consumption	3mA				
Bandwidth	> 170Hz (Digital), > 250Hz (Analogue)				
Temperature	Operating: -40°C to +125°C. Storage: -55°C to +150°C				
Shock	Operating: 1,000g 1ms ½ sine. Survival: > 6,500g 0.1ms ½ sine				
Start-up time	20ms				
Mass	0.4 gram typical				

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