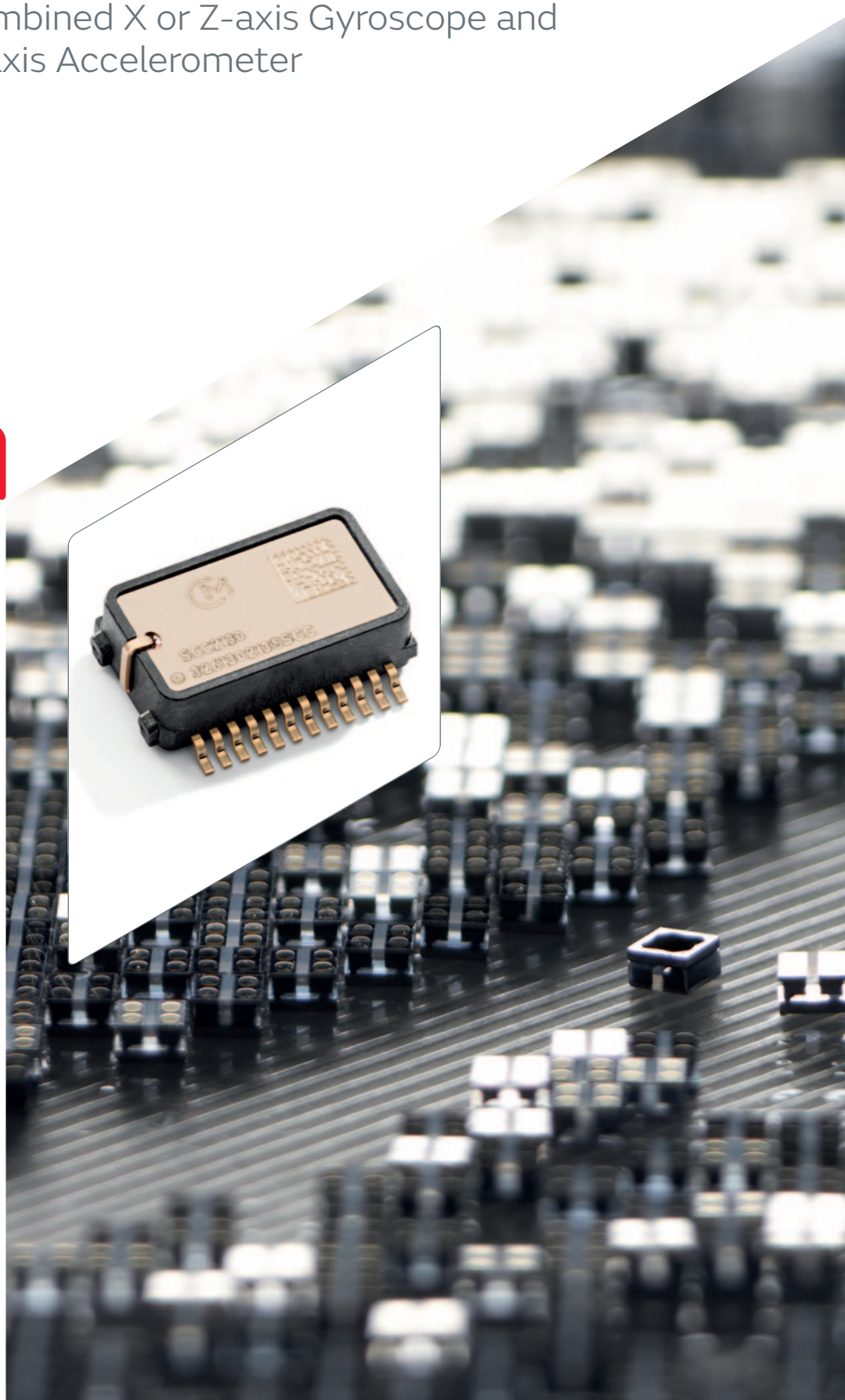
muRata
INNOVATOR IN ELECTRONICS

SCC2000 Series

Combined X or Z-axis Gyroscope and 3-axis Accelerometer



SCC2000 Series

Combined X or Z-axis Gyroscope and 3-axis Accelerometer

Key features

- Single axis X or Z-axis gyroscope with ±125°/s or ±300°/s measurement range
- 3-axis accelerometer with ±2g or ±6g measurement range
- Extensive self diagnostics features
- Excellent bias stability, low noise level and good vibration robustness
- SPI digital interface
- User selectable low pass filter via SPI
- –40°C...+125°C operating range
- 3.0V...3.6V supply voltage
- Size 15.0 x 8.5 x 4.35 mm (l x w x h)
- Proven capacitive 3D-MEMS technology
- Product platform qualified according to AEC-Q100 standard

Applications

SCC2000 series is targeted at applications demanding high stability with tough environmental requirements. Typical applications include:

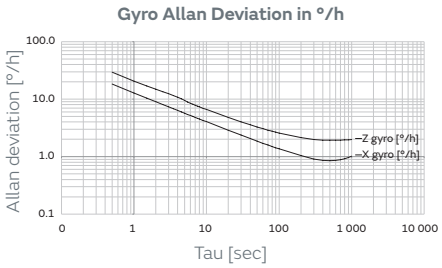
- Inertial Measurement Units (IMUs) for highly demanding environments
- Platform stabilization and control
- Machine control systems
- Electronic Stability Control (ESC)
- Hill Start Assist (HSA)
- Roll over detection
- Navigation systems

PART NUMBERS

PART NUMBER	GYRO AXIS	ACCELEROMETER AXIS	MEASUREMENT RANGES
SCC2230-E02	Z	X, Y, Z	±125°/s, ±2 g
SCC2230-D08	Z	X, Y, Z	±125°/s, ±6 g
SCC2130-D08	X	X, Y, Z	±125°/s, ±6 g
SCR2100-D08	X	-	±125°/s

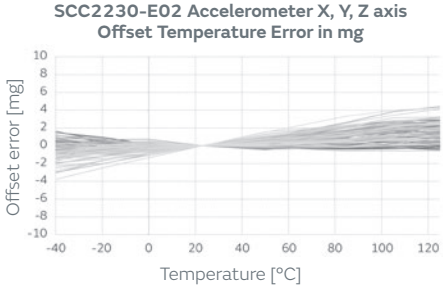
GYRO PERFORMANCE OVERVIEW

PARAMETER	X GYRO	Z GYRO
Offset temperature error	±0.8°/s	±0.8°/s
Sensitivity error	±2.5%	±2.5%
Linearity ±125°/s range	±0.5°/s	±0.5°/s
Integrated noise (RMS)	0.05°/s	0.08°/s



ACCELEROMETER PERFORMANCE OVERVIEW

PARAMETER	ACCEL 2G	ACCEL 6G
Offset temperature error	±10 mg	±18 mg
Sensitivity error	±1%	±1%
Linearity ±1g range	±5 mg	±5 mg
Linearity ±FS range	±10 mg	±50 mg
Integrated noise (RMS)	1.2 mg	2.7 mg



For more information, please refer to product data sheets available ONLINE at **www.murata.com**
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